Exhibit B

17MI-CV00761 - MCIVAN JONES FARMS, INC. ET AL V MONSANTO COMPANY (E-CASE)

Case Header | Parties & Attorneys | Docket Entries | Charges, Judgments & Sentences | Service Information | Filings Due | Scheduled Hearings & Trials | Civil Judgments | Garnishments/ Execution

This information is provided as a service and is not considered an official court record.

Click here to eFile on Case
Click here to Respond to Selected Documents
Sort Date Entries: (•) Descending ( ) Ascending
Display Options: All Entries

01/15/2018 ☐ **Petition:**
First Amended Class Action Petition.
Filed By: DON MANLEY DOWNING
On Behalf Of: MCIVAN JONES FARMS, INC., V&S JACKSON FARMS

01/03/2018 ☐ **Cert Serv Req Prod Docs Things**
Certificate of Service.
Filed By: DON MANLEY DOWNING
On Behalf Of: MCIVAN JONES FARMS, INC., V&S JACKSON FARMS

☐ **Agent Served**
Document ID - 17-SMCC-416; Served To - MONSANTO COMPANY - ST LOUIS; Server - MARKELL & ASSOCIATES, INC; Served Date - 02-JAN-18; Served Time - 14:19:00; Service Type - Special Process Server; Reason Description - Served

☐ **Notice of Service**
Issued Summons; Affidavit of Service.
Filed By: DON MANLEY DOWNING
On Behalf Of: MCIVAN JONES FARMS, INC., V&S JACKSON FARMS

12/28/2017 ☐ **Summons Issued-Circuit**
Document ID: 17-SMCC-416, for MONSANTO COMPANY - ST LOUIS.

☐ **Order - Special Process Server**
Filed By: DAVID ANDREW DOLAN

☐ **Motion Special Process Server**
Plaintiffs Motion for Special Process Server; Proposed Order.
Filed By: DON MANLEY DOWNING
On Behalf Of: MCIVAN JONES FARMS, INC., V&S JACKSON FARMS

12/27/2017 ☐ **Motion Special Process Server**
Plaintiffs Motion for Special Process Server; Proposed Order to Appoint Special Process Server.
Filed By: DON MANLEY DOWNING
On Behalf Of: MCIVAN JONES FARMS, INC., V&S JACKSON FARMS

☐ **Note to Clerk eFiling**
Filed By: DON MANLEY DOWNING

☐ **Proposed Order Filed**
Confidential Case Filing Information Sheet.
Filed By: DON MANLEY DOWNING
On Behalf Of: MCIVAN JONES FARMS, INC., V&S JACKSON FARMS

☐ **Filing Info Sheet eFiling**
Filed By: DON MANLEY DOWNING

☐ **Note to Clerk eFiling**
Filed By: DON MANLEY DOWNING

☐ **Pet Filed in Circuit Ct**
Petition.
On Behalf Of: MCIVAN JONES FARMS, INC., V&S JACKSON FARMS

☐ **Judge Assigned**

IN THE CIRCUIT COURT OF MISSISSIPPI COUNTY
STATE OF MISSOURI

MCIVAN JONES FARMS, INC., STEVE JACKSON AND VICKIE JACKSON (PARTNERS OF V&S JACKSON FARMS), on behalf of themselves and others similarly situated	)	
Plaintiffs,	)	Case No. _____
v.	)	JURY TRIAL DEMANDED
MONSANTO COMPANY,	)	
Defendant.	)	

CLASS ACTION PETITION

Plaintiffs submit this Petition, on behalf of themselves and those similarly situated, for damages against Defendant Monsanto Company ("Monsanto"), and allege as follows:

1. This action is brought by persons who have suffered damage as a result of Monsanto's commercialization of dicamba-resistant seed, which is specifically intended to be, and is, part of a weed control system in which dicamba herbicide is applied over the top of growing plants.

PARTIES

2. McIvan Jones Farms, Inc. is a corporation organized, and with its principal place of business, in Missouri that farms land on which it grows soybeans in Mississippi County, Missouri.

3. Steve Jackson and Vickie Jackson, residents of Missouri, are partners of V&S Jackson Farms, who farm land on which they grow soybeans in Dunklin County, Missouri.

4. Monsanto is a corporation organized and existing under the laws of the State of Delaware with its corporate headquarters and principal place of business in St. Louis County, Missouri.

5. Monsanto developed, licenses and sells soybean and cotton seed that have been genetically modified to be resistant to dicamba. Such seed was sold in Missouri for intended use with dicamba herbicide manufactured and sold by Monsanto and other companies.

JURISDICTION AND VENUE

6. This Court has personal jurisdiction over Monsanto because it is registered to conduct business in Missouri, has its principal place of business and headquarters in Missouri at 800 N. Lindbergh Blvd., Saint Louis, Missouri, is present and transacts substantial business in Missouri, has a registered agent in Missouri, consistently and purposefully avails itself of the privileges of conducting business in Missouri and can fairly be regarded as at home in Missouri. Moreover, Monsanto itself or through an agent entered into contracts in Missouri, committed tortious acts in Missouri, transacted business in Missouir, commercialized and sold dicamba-resistant seed in Missouri for use with dicamba herbicide in Missouri, which damaged Plaintiffs in Missouri.

7. Venue is proper in Mississippi County, Missouri pursuant to Mo. Rev. Stat. § 508.010.4 in that Plaintiff McIvan Jones Farms, Inc. was first injured in Mississippi County, Missouri.

FACTUAL BACKGROUND AND GENERAL ALLEGATIONS

A. Monsanto, Glyphosate, and Super Weeds

8. Monsanto was one of the first companies to utilize biotechnology in the field of agriculture, and has become a leading producer of genetically modified seed and agro-chemicals.

9. In the 1970s, Monsanto patented the glyphosate molecule, which became the main ingredient in Roundup herbicide. Roundup was introduced in 1974, and eventually became one of the world's most widely used herbicides.

10. Monsanto also genetically engineered seed to withstand its glyphosate herbicide, sold under the brand name Roundup Ready.

11. Rather than being applied before the crop is planted (in the "burn-down" stage), Roundup could be sprayed over the top of growing crops genetically modified to withstand it. Over-the-top application of glyphosate is now commonplace.

12. Monsanto began selling Roundup Ready soybean seed in 1996 and Roundup Ready corn seed in 1998. Other crops genetically altered to withstand Roundup herbicide include canola, cotton, alfalfa, and sugar beets.

13. The Roundup Ready crop system became Monsanto's flagship. Monsanto's Roundup herbicide and Roundup Ready seed each supported the other, becoming a blockbuster combination.

14. By 2010, ninety percent of soybeans and at least seventy percent of corn and cotton were planted from Roundup Ready seeds.

15. As of 2016, glyphosate had become the most-used agricultural chemical ever.

16. Weeds, however, have developed resistance to glyphosate. These glyphosate-resistant weeds are known as "super weeds."

17. Monsanto's sale and distribution of Roundup set in motion a dangerous cycle whereby weeds evolve to resist the chemicals designed to destroy them, forcing farmers to apply higher doses or use different herbicides.

18. Monsanto's herbicide directly contributed to this problem. All the while, Monsanto has made massive profits.

B. Monsanto Develops Dicamba-Resistant Cotton and Soybean Seeds

19. Recognizing the opportunity to capitalize on the weed resistance its own product produced, Monsanto developed a crop system featuring dicamba, an exceptionally volatile and damaging herbicide that has been on the market in various forms since the 1960s.

20. According to Monsanto President, Brett Begemann, this new crop system will provide Monsanto "a source of growth longer term." Carey Gillam, *Monsanto to invest more than $1 bln in dicamba herbicide production* (June 24, 2015), https://www.reuters.com/article/monsanto-dicamba/monsanto-to-invest-more-than-1-bln-in-dicamba-herbicide-production-idUSL1N0ZA1XN20150624.

21. Dicamba is a broad-spectrum systemic herbicide that destroys broadleaf weeds and plants.

22. Dicamba mimics the plant hormone auxin, causing uncontrolled cell division and growth, causing the plant to grow so fast that it cannot retain the nutrients it requires, which kills the plant.

23. It is well known to agro-chemical companies like Monsanto that dicamba has extreme negative effects on desirable broad-leaf plants, including trees, fruits, vegetables, and various crops, especially soybeans.

24. Certain plants are extremely sensitive to dicamba, even in trace amounts, including soybeans and cotton.

25. A healthy soybean plant will produce fully-developed pods and leaves throughout the stem of the plant. A soybean plant damaged by dicamba suffers significant loss of pods

throughout the stem, reduced number of beans per pod, and discoloration and cupping of the leaves of the plant.

26. Dicamba also is highly volatile, meaning that it has a high propensity to vaporize after contact with target plants and then move as vapor through the air to other plants. Vaporized dicamba can travel great distances before falling onto and damaging desirable off-target plants, including non-resistant crops.

27. For all these reasons, dicamba historically has been used in pre-planting or post-harvest burndown. Because there are typically no neighboring crops to damage during burndown, it is relatively safe to apply even highly volatile chemicals, such as dicamba, during this stage.

28. Monsanto, however, wanted a dicamba herbicide that, unlike before, and similar to glyphosate, could be applied "in-crop," in other words, over the top of growing plants.

29. In order to apply dicamba in this manner so as to kill unwanted weeds but not the crop, Monsanto, by at least 2008, had genetically engineered soybean and cotton seed for resistance not only to glyphosate but also dicamba.

30. Monsanto genetically engineered soybean and cotton seed to withstand dicamba expressly for use with dicamba herbicide. There is no reason for, or value in, genetic modification to tolerate dicamba herbicide except for use of such herbicide.

31. The cost of Monsanto's seed with the genetic modification for dicamba resistance is significantly more than seed without it.

32. In addition to dicamba-resistant seed, Monsanto also developed what it represented to be a low-volatility dicamba herbicide that could be used with the seed "in-crop," that is, over the top of growing plants.

33. Monsanto aggressively advertised and touted what became its Roundup Ready Xtend Crop System ("Xtend Crop System"), designed for and consisting of dicamba-resistant seed and dicamba herbicide.

34. Monsanto has long considered – and marketed – dicamba-resistant seed and dicamba herbicide as an integrated system of weed control. Monsanto promotes its "Xtend Crop System" as "comprised of both seed and herbicide solutions." *The Next Step in Weed Management*, https://www.roundupreadyplus.com/Content/assets/docs/forum/NeedToKnow_RoundupReadyXtendCropSystem.pdf (last visited Dec. 19, 2017).

35. Monsanto not only promoted its own development of resistant-seed/dicamba-herbicide crop system, but actively and affirmatively encouraged, promoted, and collaborated with other companies to further it.

36. Monsanto entered into agreements with chemical company BASF to collaborate in the development of such a system, consisting of dicamba-resistant seed to be supplied by Monsanto, and in-crop dicamba herbicide to be supplied by both Monsanto and BASF.

37. In January 2009, Monsanto and BASF announced a joint-licensing agreement to accelerate use of dicamba-based weed control products, both participating in development of formulations of dicamba to be used with dicamba-resistant seed.

38. In a joint press release on November 2, 2010, Monsanto and BASF announced "significant progress toward launching next-generation dicamba-based weed control systems for soybeans and cotton." Joint Press Release, *BASF and Monsanto Announce Progress in Dicamba Formulations* (Nov. 2, 2010), https://monsanto.com/news-releases/basf-and-monsanto-announce-progress-in-dicamba-formulations/.

39. Kerry Preete, Monsanto vice president of crop protection, stated: "Together the strength of the formulation expertise BASF has with dicamba and our team's biotech focus seeks to deliver another breakthrough product in weed control." *Id.*

40. Markus Heldt, president of BASF's Crop Protection division, stated: "The dicamba tolerant system is designed [to] give growers pre- and post-emergence application flexibility, allowing them to better manage their resources and thus improving productivity." *Id.*

41. In a joint press release on March 14, 2011, Monsanto and BASF stated that they had entered into an agreement to "collaborate on the advancement of dicamba tolerant cropping systems. The companies have granted reciprocal licenses and BASF has agreed to supply formulated dicamba herbicide products to Monsanto." Joint Press Release, *BASF and Monsanto Take Dicamba Tolerant Cropping System Collaboration to the Next Level* (March 14, 2011), https://monsanto.com/news-releases/basf-and-monsanto-take-dicamba-tolerant-cropping-system-collaboration-to-the-next-level/.

42. Robb Fraley, Monsanto's chief technology officer, stated: "Our work with BASF brings us one step closer to bringing more improved weed control offerings to farmers. We expect the formulations to be an excellent complement to Monsanto's dicamba tolerant seed technologies when they are brought to market." *Id.*

43. Monsanto's development of seed genetically engineered to be resistant to dicamba meant that the new dicamba formulations would be sprayed over the top of crops after their emergence from the ground. In turn, this means that dicamba would be sprayed much later in the year than before – in months that are hot and humid – and in the vicinity of susceptible non-resistant crops also emerging.

44. From the early stages of Monsanto's development of a crop system using dicamba, weed scientists and others warned of harm from large-scale dicamba use in summer months.

45. On April 29, 2010, Monsanto applied with the Environmental Protection Agency (EPA) for registration of M-1691 Herbicide, a diglycolamine (DGA) salt of dicamba, supposedly less volatile than older formulations.

46. On July 30, 2012, Monsanto applied for EPA registration of M-1768 Herbicide, also a DGA dicamba salt, this time with "VaporGrip® Technology," a technology that supposedly further lowered volatility, for use post-emergence, or over-the-top, of genetically-modified, dicamba-resistant soybeans and cotton.

47. The USDA deregulated the soybean and cotton seed genetically engineered by Monsanto for resistance to dicamba on or about January 14, 2015, meaning that there would be no further regulation by that agency.

48. At that point, however, there was no registration, from the EPA for any "low" volatility dicamba for use over the top of growing plants.

49. Monsanto had a decision to make: wait to sell its dicamba-resistant seed until the EPA registered the supposed "low" volatility dicamba, or sell that seed without corresponding "low-volatility" dicamba herbicide approved for in-crop use. Monsanto chose profit and advancement of its own interests over the harm to others that inevitably would occur.

50. Monsanto commercialized Bollgard II XtendFlex Cotton ("XtendFlex Cotton") for the 2015 growing season. Monsanto rolled out its new, XtendFlex Cotton for a "limited introduction" of 500,000 acres. It did so despite lack of approval for over-the-top dicamba.

51. Because the EPA had not yet registered the supposed "low-volatility" version of dicamba herbicide, farmers were unable to buy corresponding dicamba herbicide approved for in-crop use on XtendFlex Cotton.

52. Monsanto had been touting the supposed benefits of the Xtend Crop System for years, and aggressively promoted the new cotton seed.

53. Monsanto's public stance was that dicamba herbicides were not to be used over-the-top. Monsanto representatives, however, advised farmers to do just the opposite – to spray existing dicamba products over the top of their crops in 2015.

54. It otherwise was foreseeable that farmers would do so given that the very purpose for development of, and value in using, seed genetically modified for dicamba resistance is use of dicamba herbicide over the top.

55. Monsanto knew or should have known that crop damage would occur as a direct result of its XtendFlex Cotton release in 2015.

56. Farmers did experience dicamba damage to their crops in 2015.

57. Again, Monsanto had a decision to make for the 2016 crop year. Again, it put its own financial interests ahead of safety and moved forward with commercialization of dicamba-resistant soybeans.

58. Monsanto's financial incentive to ignore clear warnings was and is enormous.

59. Monsanto's dicamba-resistant seed, the receiver for in-crop dicamba herbicide, is a new flagship and core business growth driver for Monsanto.

60. As of 2015, Monsanto already had announced plans for the direct and licensed release of some 70 varieties of soybeans with the dicamba-resistant trait.

61. Monsanto, also as of 2015, had already announced that it would invest some $1 billion in a production facility for its dicamba herbicide.

62. In an interview, Monsanto's Vice President of Global Strategy, Scott Partridge, stated that Monsanto had bred the dicamba-resistant trait into its entire stock of soybeans and the alternative to waiting would have been "to not sell a single soybean in the United States" that year. Emily Flitter, Special Report, *The decisions behind Monsanto's weed-killer crisis* (Nov. 9, 2017), https://uk.reuters.com/article/uk-monsanto-dicamba-specialreport/the-decisions-behind-monsantos-weed-killer-crisis-idUKKBN1D91Q9.

63. Monsanto commercialized its genetically modified dicamba-resistant Roundup Ready 2 Xtend soybeans ("Xtend Soybeans") for the 2016 growing season.

64. As with the 2015 release of XtendFlex Cotton, there was no dicamba herbicide approved for over-the-top use in 2016 when Monsanto commercialized its dicamba-resistant Xtend Soybeans.

65. Nevertheless, and despite the prior year's damage from its XtendFlex Cotton, Monsanto proceeded with release of Xtend Soybeans for the 2016 growing season, telling farmers that approval of its new "low" volatility dicamba herbicide was "imminent." Monsanto Q1 2016 Results Earnings Call Transcript (Jan. 6, 2016), https://seekingalpha.com/article/3794576-monsanto-companys-mon-ceo-hugh-grant-q1-2016-results-earnings-call-transcript.

66. EPA registration for the new herbicide, however, did not come until after harvest in 2016.

67. Again, it was foreseeable that farmers would spray older dicamba formulations over the top of dicamba-resistant crops, and that the sale of dicamba-resistant soybean seed and

continued sale of dicamba-resistant cotton seed in 2016 would lead to further dicamba damage to non-dicamba-resistant crops.

68. Not only did damage result in 2016, it was on a much larger scale with both Monsanto's dicamba-resistant cotton and soybeans on the market.

69. Monsanto was well aware of numerous reports of dicamba damage during the 2016 crop year.

70. Monsanto's headlong drive to market was and is in reckless pursuit of gaining ever more market share through its new Xtend Crop System at the expense of innocent farmers.

71. In fact, damage to off-target plants actually benefits Monsanto by pressuring farmers to purchase its dicamba-resistant seed as a protective measure to avoid damage from dicamba use by others.

72. In addition to soybeans and cotton, Monsanto also has petitioned the USDA for deregulation of a genetically modified dicamba-resistant corn.

C. Introduction of Dicamba Herbicides for In-Crop Use

73. On November 9, 2016, Monsanto received a two-year conditional registration from the EPA for its in-crop dicamba herbicide, which Monsanto commercialized under the trade name XtendiMax with VaporGrip Technology ("XtendiMax").

74. XtendiMax is intended for application over the top of Monsanto's dicamba-resistant soybean and cotton.

75. Monsanto, which provided the EPA only with its own volatility studies, refused independent volatility testing of XtendiMax with "VaporGrip Technology." Monsanto repeatedly denied university requests to research volatility of the herbicide. While Monsanto did provide samples of XtendiMax to various universities, including the University of Missouri and the

University of Arkansas, the samples came with contracts containing never-before-seen strict constraints which expressly prohibited volatility testing.

76. In January 2017, the Arkansas Joint Budget Committee met to discuss regulation of the new dicamba formulations. Discussion included Monsanto's repeated refusal to allow third-party testing of its "VaporGrip" technology, and that Monsanto's Boyd Carey was on record as saying that neither the University of Arkansas nor any other university would be allowed to test VaporGrip for fear that the results might jeopardize the federal label.

77. The new dicamba formulations otherwise were not adequately tested for sufficient time or under real-world conditions in areas in which they would be sold. Among other things, according to publicly available EPA documents, Monsanto field tested its XtendiMax with "VaporGrip Technology" in only two locations – Texas and Georgia – involving specific soil types, only a few acres, and a limited time span. There was no modeling of large-scale spraying.

78. Notwithstanding warnings from weed scientists, and the crop damage that occurred in 2015 and 2016, Monsanto rolled out its full brand-name line of Xtend products, including XtendiMax, XtendFlex Cotton and Xtend Soybeans for the 2017 crop season.

79. Monsanto's much-touted "Xtend Crop System," entailing dicamba-tolerant seed and in-crop dicamba herbicide sold by Monsanto – as well as BASF and DuPont – became fully available for 2017.

80. On or about December 20, 2016, BASF received a two-year conditional EPA registration for use of BASF's dicamba herbicide Engenia with Monsanto's Xtend seed.

81. Monsanto entered into agreements with DuPont allowing DuPont to utilize, market, and sell dicamba herbicide for in-crop use containing Monsanto's "VaporGrip Technology" under DuPont's trade name FeXapan.

82. On or about February 16, 2017, DuPont received two-year conditional EPA registration for use of dicamba-based FeXapan with VaporGrip Technology with Monsanto's Xtend seed.

83. All these companies did and do market the in-crop dicamba herbicide as part of a crop system using Monsanto's dicamba-resistant seed.

84. Monsanto advertises and markets XtendiMax as a low-volatility dicamba formulation with "VaporGrip Technology," designed for use with dicamba-resistant seed sold and licensed only by Monsanto.

85. Monsanto has described XtendiMax as "[a]n integral component of the Roundup Ready® Xtend Crop System." *Roundup Ready Xtend Crop System Chemistry*, http://www.roundupreadyxtend.com/About/Chemistry/Pages/default.aspx (last visited Dec. 19, 2017).

86. BASF advertises and markets Engenia as a low-volatility dicamba formulation designed for use with dicamba-resistant seed, sold and licensed only by Monsanto, identified as "Dicamba-tolerant soybean sold under the trait name Roundup Ready 2 Xtend Soybeans." *Introducing the Most Flexible and Advanced Dicamba for Dicamba-Tolerant Crops*, http://agproducts.basf.us/campaigns/engenia/assets/pdf/Engenia-Soybeans-National-TIB.pdf (last visited Dec. 19, 2017).

87. Monsanto and DuPont issued a joint press release in July, 2016 announcing their multi-year dicamba supply agreement which Mike Frank, Monsanto vice president, said "represent[ed] continued commitment to the Roundup Ready® Xtend Crop System." Joint Press Release, *Monsanto and DuPont Sign Dicamba Supply Agreement* (July 7, 2016),

http://www.dupont.com/corporate-functions/media-center/press-releases/monsanto-dupont-sign-dicamba-supply-agreement.html (last visited Dec. 19, 2017).

88. DuPont advertises and markets FeXapan as a low-volatility dicamba formulation with "VaporGrip Technology" designed for use with dicamba-resistant seed, sold only by Monsanto, calling FeXapan herbicide "part of the Roundup Ready 2 Xtend® Acre Solution." FeXapan™ Herbicide Plus Vaporgrip® Technology, http://www.dupont.com/products-and-services/crop-protection/soybean-protection/products/fexapan.html (last visited Dec. 19, 2017).

89. In addition to its collaboration agreement with BASF, and its agreement with DuPont for use and sale of dicamba herbicide with the "VaporGrip Technology" Monsanto entered into technology licensing agreements with DuPont, "includ[ing] a multi-year, royalty-bearing license" allowing DuPont to market and sell soybean seed containing Monsanto's technology, including dicamba resistance. Joint Press Release, *DuPont and Monsanto Reach Technology Licensing Agreements on Next-Generation Soybean Technologies* (March 26, 2013) https://www.pioneer.com/home/site/about/news-media/news-releases/template.CONTENT/guid.EAB5E402-FECE-0123-144E-CBC62A6D8513.

90. DuPont offered more than 30 varieties of soybean seed with Roundup Ready 2 Xtend® dicamba-resistant technology under its own Pioneer brand through its license with Monsanto.

91. Monsanto promoted and represented its dicamba crop system as safe when it is not. For example, in a 2010 press release, Monsanto and BASF stated that they had made "significant progress toward launching next-generation dicamba-based weed control systems" and that the "new formulation work offers even further improvement in physical characteristics that result in better performance and safety to nearby crops." Joint Press Release, *BASF and*

Monsanto Announce Progress in Dicamba Formulations (Nov. 2, 2010), https://monsanto.com/news-releases/basf-and-monsanto-announce-progress-in-dicamba-formulations/.

92. Even in 2017, Monsanto represented that its "VaporGrip" technology "significantly minimizes dicamba's volatility potential after spraying – provid[ing] growers and applicators confidence in on-target application of dicamba." *Significant Reduction in Volatility Potential,* https://www.roundupreadyxtend.com/About/vaporgriptechnology/Pages/default.aspx (last visited Dec. 19, 2017).

93. XtendiMax, Engenia and FeXapan, however, still are volatile.

94. Monsanto knew or should have known that there is no formulation that reduces volatility in dicamba to a level at which it does not volatilize and move from the target application. In fact, any formulation that would eliminate volatility would make the herbicide ineffective.

95. Monsanto sold and/or licensed, and farmers planted, dicamba-resistant seed on approximately 25 million acres of soybean and cotton fields in 2017.

96. Monsanto knew or should have known that commercialization of dicamba-resistant seed would result in increased use of dicamba herbicide, marketed for in-crop use during summer months when among other things, conditions such as temperature inversions occur most frequently and non-target crops have emerged that will be at imminent risk.

97. Temperature inversions exacerbate the risk of damage by volatilization.

98. A temperature inversion occurs where the air above the ground is warmer than the ground itself. An inversion layer forms where the warmer air is present, blocking atmospheric

flow. This causes the air over the inversion layer to become very stable, trapping everything inside of the layer.

99. Temperature inversions can be difficult to predict and there are not a lot of reliable tools to detect an inversion event. Inversions also can occur after application of dicamba already has taken place.

100. Temperature inversions are especially common in Missouri. According to a study by scientists from the University of Missouri, temperature inversions occur on more than half of the days in the crop-growing months of March through July. The likelihood of such inversions increased the volatility risk of Monsanto's dicamba crop system.

101. Even when sprayed properly, supposed "low" volatility, in-crop dicamba herbicides still can and do volatilize and become subject to movement in winds as low as 3 miles per hour.

102. In addition, dicamba's volatility is long-lived, meaning longer exposure for non-tolerant plants and increased risk of movement. Field tests undertaken in 2017 showed that volatility of the dicamba formulations sold by Monsanto, BASF and DuPont occurred over at least a 2-3 day period after application.

103. The number of acres that can be damaged by dicamba is directly related to the amount applied in an area.

104. As Monsanto knew or should have known, use of dicamba in areas with prevalent weeds such as pigweed, including Missouri, would be high, increasing the risk to susceptible off-target crops. As Monsanto also knew or should have known, the problem is compounded in areas such as Southeast Missouri, Northeast Arkansas, Southern Illinois, and Western Tennessee with

high-volume planting of cotton and/or soybeans, which, if not dicamba-resistant, are highly susceptible to dicamba.

D. Dicamba Damage in 2017

105. In 2017, there were thousands of complaints of dicamba damage. According to the EPA, over 3.6 million acres – about 4 percent of all soybeans planted in the United States – were damaged by dicamba in 2017 alone.

106. High incidence of damage, predictably, occurred in Southeast Missouri, Northeast Arkansas, Southern Illinois, and Western Tennessee.

107. In these areas, dicamba herbicides were sprayed by so many people that the atmosphere was loaded with dicamba. Damage observed in 2017 included entire hundred-acre fields of soybeans with uniform cupped leaves throughout.

108. As of October 26, 2017, the Missouri Department of Agriculture had received more than 300 dicamba-related complaints, as compared with 27 complaints in 2016 and 3 in 2015. The majority of complaints came from southeast Missouri, particularly Mississippi, New Madrid, Stoddard, Scott and Dunklin Counties.

109. Estimates are that at least 325,000 acres of soybeans were injured by dicamba in Missouri alone.

110. Nationally, more than 2,000 dicamba-related injury investigations have been or are being conducted with more than 3.6 million acres of soybeans demonstrating signs of dicamba damage.

111. A leading weed scientist, Dr. Kevin Bradley from the University of Missouri has stated: "I've been doing this for more than 20 years now and I was around when Roundup Ready was introduced . . . In my opinion, this is nothing like the introduction of any trait or technology

as far as the scope and the significance of the injury that's been observed across the U.S." He further stated: "I just don't think we know enough yet to apply [dicamba] safely." Eli Chen, *As harvest season begins, farmers worry how dicamba herbicide could affect next year's crop* (Sept. 19, 2017), http://news.stlpublicradio.org/post/harvest-season-begins-farmers-worry-how-dicamba-herbicide-could-affect-next-year-s-crop#stream/0.

112. Symptomology of dicamba damage to a soybean plant, including upward leaf cupping, is unique to dicamba. Cupping throughout a field is a typical pattern indicating volatilization.

113. Dr. Bradley explained that the pattern of damage in most fields and the symptomology suggests that volatilization is to blame: "The majority of fields I've been in are injured from one end to the other with no discernable difference in soybean symptomology . . . . This suggests problems with off-site movement through volatility." Michelle Cummings, *The Dicamba Dilemma*, Momentum, Fall 2017, at 13, https://view.joomag.com/momentum-fall-2017/01509730015081875 62?page=13.

114. Dr. Jason Norsworthy, Professor of Crop, Soil and Environmental Sciences for the University of Arkansas, told a task force of the Arkansas State Plant Board that he believed volatility was a "major cause of the issues" in 2017. Doug Rich, *Changes needed for dicamba formulations* (Sept. 25, 2017), http://www.hpj.com/crops/changes-needed-for-dicamba-formulations/article_61d06219-f796-5fbd-93e1-f789d923c541.html.

115. Field experiments conducted by university researchers in the summer of 2017 also identified evaporating dicamba as the cause of the symptomology.

116. Among other experiments, dicamba was sprayed into trays of soil at a remote location and then brought to and placed between rows of soybeans covered with plastic. The dicamba evaporated from the trays and caused damage to surrounding soybeans.

117. Volatilization cannot be corrected with education.

118. Dr. Rick Cartwright, a plant pathologist, University of Arkansas Extension administrator and Arkansas State Plant Board member, explained, "You apply [new dicamba formulations] to soybeans, and 36 hours later the product gets up and goes somewhere else. I don't know how you educate people to fix that." Greg D. Horstmeier, *Arkansas Sets Dicamba Limits* (Sept. 22, 2017), https://www.dtnpf.com/agriculture/web/ag/news/crops/article/2017/09/22/plant-board-limits-herbicide-use-2.

119. Steve Smith, a former member of Monsanto's dicamba advisory committee, testified at a congressional hearing that "[t]he widespread use of dicamba is incompatible with Midwestern agriculture." Moreover, he concluded that "[e]ven the best, the most conscientious farmers cannot control where this weed killer will end up." Danny Hakim, *Monsanto's Weed Killer, Dicamba, Divides Farmers* (Sept. 21, 2017), https://www.nytimes.com/2017/09/21/business/monsanto-dicamba-weed-killer.html.

120. Mr. Smith was removed from Monsanto's dicamba advisory committee due to what Monsanto characterized as a "conflict of interest." *Id.*

121. Dr. Bradley has publicly expressed his opinion that all dicamba-based herbicides need to be kept "in the pre-plant, burndown, pre-emergence use pattern," and should not be used post-emergence. He explained that "the risk is too great for off-target movement to be spraying this for Palmer amaranth [pigweed] and waterhemp in soybeans." David Bennett, *What's the*

latest on dicamba drift in Missouri? (Sept. 1, 2017), http://www.deltafarmpress.com/soybeans/what-s-latest-dicamba-drift-missouri.

122. On August 2, 2017, Monsanto issued "An Open Letter to Our Farmer-Customers." Calling farmers the "heart and soul of our company," Monsanto stated that it was taking reports of crop injuries from dicamba "extremely seriously," and represented its "commit[ment] to supporting [farmers] at every stage of the season – every year." *An Open Letter to Our Farmer-Customers* (Aug. 2, 2017), https://monsanto.com/products/product-stewardship/articles/to-our-farmer-customers/. Monsanto represented to farmers with dicamba crop injury: "[W]e will stand by you throughout the growing season." *Id.*

123. In October, 2017, the EPA announced that, by agreement with Monsanto, BASF and DuPont, it was re-classifying in-crop dicamba as a restricted use herbicide. Among other things, only certified applicators with special training, and those under their supervision, may purchase and apply in-crop dicamba during the 2018 growing season. Other changes include: additional record-keeping requirements; limiting applications to when maximum wind speeds are below 10 mph (from 15 mph); reducing the times during the day when applications can occur; and additional tank clean-out instruction.

124. The Missouri Department of Agriculture, on November 16, 2017, issued a Special Local Need Label for Engenia, limiting application to only certified applicators, requiring special dicamba training (along with verification of training presented to the seller), and prohibiting spraying before 7:30 am and after 5:30 pm. In addition, use of Engenia is prohibited after June 1, 2018 in Dunklin, Pemiscot, New Madrid, Stoddard, Scott, Mississippi, Butler, Ripley, Bollinger counties and Cape Girardeau, and prohibited after July 15, 2018 in all remaining

counties. The Department issued the same restrictions for XtendiMax and FeXapan on December 11, 2017.

125. Such changes, however, do not reduce the inherent volatility of dicamba or address exposure through that volatility.

126. Notwithstanding the risk, and despite its pledges of responsibility, Monsanto plans to sell even more Xtend Soybeans in 2018, reportedly 40 million acres. This means that even more dicamba herbicides will be sprayed over the top in 2018 than in 2017.

127. Farmers are faced with a difficult choice – either buy more expensive genetically modified Xtend seed many do not want or run the risk that their crops will be damaged by dicamba.

128. Even this course is unavailable to farmers who grow crops for which there is no dicamba-tolerant seed.

129. The situation boils down to dicamba being an all-or-nothing technology. Either everyone plants dicamba-resistant seed and sprays dicamba or farmers choose the seed they want to plant and no one sprays dicamba. Monsanto's attempt to force everyone to use its Xtend Crop System is not reasonable or in the public interest.

130. Among other things, there are alternatives to glyphosate, including glufosinate (e.g. LibertyLink sold by Bayer) and other herbicides in development. While dicamba is effective against weeds, it is ruinous to non-resistant crops. Dicamba is highly dangerous not only to non-tolerant crops like soybeans and cotton, but fruits, vegetables, trees, and flowers that feed honeybees. Moreover, extensive use of dicamba is likely to produce the same tolerance as did extensive use of glyphosate.

131. Plaintiffs grew soybean crops susceptible to and not genetically modified to be resistant to dicamba. Each observed uniform leaf cupping throughout his fields indicative of volatilization. Each suffered yield loss caused by dicamba.

132. Injury to Plaintiffs' non-resistant crops is a direct result of Monsanto's development, marketing and sale of a dicamba-based crop system featuring genetically-modified seed specifically developed and commercialized for the purpose of use with in-crop dicamba herbicide.

CLASS ACTION ALLEGATIONS

133. Plaintiffs bring this class action pursuant to Missouri Rule of Civil Procedure 52.08 on behalf of themselves and all persons and entities who are citizens of Missouri and who in 2017 were producers (*i.e.*, an owner, operator, landlord, waterlord, tenant or sharecropper, who shares in the risk of producing crops and is entitled to share in the crop available for marketing from the farm, as reflected in FSA Form 578, but not landlords receiving only a fixed cash amount for renting the land that does not vary with yield) of soybean crops not resistant to and damaged by dicamba herbicide.

134. Excluded from the Class are Defendant, including any parent, subsidiary, affiliate or controlled person of Defendant; Defendant's officers, directors, agents or employees, the judicial officers assigned to this litigation; and members of their staffs and immediate families. Also excluded are persons or entities who purchased dicamba-resistant (Xtend technology whether sold or licensed by Monsanto) seed.

135. The proposed Class meets all requirements for class certification. The Class satisfies the numerosity standards, as it is believed to number well into the hundreds of persons in Missouri. As a result, joinder of all Class Members in a single action is impracticable. Class

Members may be informed of the pendency of this Class Action by mail, published and/or broadcast notice.

136. There are questions of fact and law common to the Class which predominate over any questions affecting only individual members. Questions of law and fact common to the Class arising from Defendant's actions include, without limitation:

a) Whether dicamba is inherently and unavoidably dangerous when used over the top of growing plants during summer months when other non-dicamba resistant susceptible plants also are emergent;

b) Whether Monsanto carried on an abnormally dangerous activity including:

1) whether selling seed genetically engineered for the express purpose of over-the-top dicamba application entails high degree of risk of harm to land or chattels of others;

2) whether the likelihood of such harm is great;

3) inability to eliminate the risk by exercise of reasonable care;

4) whether the new use of dicamba is not a matter of common usage;

5) the inappropriateness of such activity to the place carried on; and whether the value of such activity to the community is outweighed by its dangerous attributes;

c) Whether it was foreseeable to Monsanto that Plaintiffs would be harmed by its sale of seed genetically modified for resistance to dicamba intended for use as part of a crop system involving application of dicamba over the top of growing plants in the vicinity of non-resistant susceptible crops;

d) Whether Monsanto owed a duty of care to Plaintiffs;

e) Whether Monsanto breached a duty of care to Plaintiffs;

f) Whether Monsanto's breach of duty caused harm to Plaintiffs;

g) Whether Monsanto sold a product unreasonably dangerous when used in a manner reasonably anticipated and Plaintiffs were harmed by such defective condition;

h) Whether invasion of dicamba onto property possessed by Plaintiffs constitutes a trespass and whether Monsanto aided and abetted a trespass;

i) Whether Monsanto acted with complete indifference to or disregard for the rights of others.

137. The questions set forth above predominate over any questions affecting only individual persons, and a class action is superior with respect to considerations of consistency, economy, efficiency, fairness and equity, to other available methods for the fair and efficient adjudication of this controversy.

138. A class action is the appropriate method for the fair and efficient adjudication of this controversy. The presentation of separate actions by individual Class members could create risk of inconsistent and varying adjudications, establish incompatible standards of conduct for Defendant and/or substantially impair or impede the ability of Class members to protect their interests.

139. The named Plaintiffs are adequate representatives of the Class. Claims or defenses of Plaintiffs are typical of those of the Class. Plaintiffs are members of the Class and their interests do not conflict with interests of members of the Class they seek to represent. The interests of Class members will be fairly and adequately protected by Plaintiffs and their undersigned counsel, who have extensive experience prosecuting complex class action litigation.

140. Maintenance of this action as a class action is a fair and efficient method for adjudication. It would be impracticable and undesirable for each member of the Class to bring a separate action. In addition, the maintenance of separate actions would place a substantial and unnecessary burden on the courts and could result in inconsistent adjudications, while a single class action can determine, with judicial economy, the rights of all members of the Class.

CLAIMS FOR RELIEF

COUNT I – STRICT LIABILITY ULTRAHAZARDOUS

141. Plaintiffs incorporate by reference Paragraphs 1 - 140 as though fully alleged herein.

142. Monsanto's dicamba crop system, entailing dicamba-resistant seed and in-crop use of dicamba herbicide, has a high degree of risk of harm to others, specifically, farmers who grow susceptible non-dicamba resistant crops.

143. The likelihood of serious harm to non-resistant crops from exposure to dicamba is great.

144. The risk of harm cannot be eliminated with exercise of reasonable care.

145. A crop system entailing application of dicamba over the top of growing plants is not a matter of common usage, but to the contrary, is new.

146. Monsanto's promotion and sale of dicamba-resistant cotton and soybean seed in Missouri, expressly for use with dicamba herbicide to be sprayed over the top of growing plants was and is inappropriate given factors including foreseeably high usage of dicamba, as well as high levels of crops, including soybeans, particularly susceptible to off-target damage. Dicamba is so inherently dangerous to susceptible non-dicamba tolerant crops as to be unsafe and unusually dangerous for use in Missouri.

147. The value of a dicamba-based crop system to the community is not outweighed by its dangerous attributes.

148. Monsanto's dicamba crop system is an ultrahazardous activity for which Monsanto can and should be strictly liable.

149. As a result of that activity, Plaintiffs were harmed by damage to their crops from exposure to dicamba and loss of yield, which is the kind of harm the possibility of which makes the activity abnormally dangerous.

150. Monsanto's conduct in instituting and carrying out this ultrahazardous activity showed a complete indifference to or conscious disregard of the rights of others, including Plaintiffs. Punitive damages are thus warranted.

COUNT II – NEGLIGENCE

In the alternative to Count I, Plaintiffs assert this Count II for negligence.

151. Plaintiffs incorporate by reference Paragraphs 1 - 140 as though fully alleged herein.

152. Monsanto recognizes its role as self-professed innovator and promoter of herbicides and crops genetically modified to withstand them.

153. Monsanto pledges that it "places the highest priority on the responsible development, manufacture and use of crop protection products." *Product Stewardship and The Pledge*, https://monsanto.com/products/product-stewardship/stewardship-pledge/ (last visited Dec. 19, 2017).

154. Monsanto represents that it adheres to "the responsible development, management and use of technologies and products across our seeds, traits, and crop protection businesses through the entire product life cycle." *Product Stewardship*, https://monsanto.com/products/product-stewardship/ (last visited Dec. 19, 2017).

155. According to Monsanto, "[s]tewardship is the shared responsibility of Monsanto and those who provide, handle and use our products . . . We want to ensure our products continue to be used properly. By following product life cycle stewardship processes, we stand behind our

products from research and discovery to discontinuation and disposal." *Product Stewardship Safety*, https://monsanto.com/products/product-stewardship/product-stewardship-safety/ (last visited Dec. 19, 2017).

156. Farmers are Monsanto's most immediate stakeholders. Those with non-resistant crops susceptible to dicamba are the most likely to be harmed by Monsanto's irresponsible conduct.

157. Discussing farmers' concerns over the dicamba damage in 2017, Monsanto described farmers as "the lifeblood of our company and our first priority." Brian Naber, *Dicamba Field Investigations: What Monsanto Has Learned So Far* (July 21, 2017), https://monsanto.com/products/articles/dicamba-field-investigations-monsanto-learned-far/.

158. Monsanto knew that its commercialization, promotion, sale, and licensing of dicamba-resistant seed would result in significant use of dicamba herbicide over the top of growing plants. Monsanto developed such seed for this very purpose, which was intended and anticipated by Monsanto.

159. Monsanto knew or should have known that even supposed "low-volatility" dicamba herbicide is still volatile, and still at high risk of moving off-target and damaging desirable non-resistant crops.

160. The vast majority of damage in 2017 was attributable to volatility of dicamba, a function of chemistry and formulation rather than manner of application.

161. To the extent damage was attributable to physical drift, Monsanto also knew or should have known that such drift was highly likely to occur.

162. Physical drift, as opposed to volatilization, is movement of spray droplets to non-target areas.

163. Dicamba not only is very volatile, but also very prone to physical drift.

164. Such drift can be influenced by weather, wind speed and direction, droplet size and ground speed or spray pressure.

165. Temperature inversions increase the likelihood of physical drift as well as movement upon volatilization.

166. Monsanto knew or should have known that conditions in Missouri, including temperature inversions and a high level of crops susceptible to dicamba, created high risk of dicamba damage whether from volatilization or physical drift.

167. Moreover, as described even by the EPA, the level of precaution necessary to prevent dicamba from moving off target is "extraordinary." Tom Polansek, *Monsanto, BASF weed killers strain U.S. states with damage complaints* (November 1, 2017), https://www.reuters.com/article/us-usa-pesticides-complaints/monsanto-basf-weed-killers-strain-u-s-states-with-damage-complaints-idUSKBN1D14N0.

168. Label instructions were and are extraordinarily difficult if not impossible to follow. For example, the XtendiMax instructions entailed at least four sources: a container label with instructions for use, a supplemental label, an ever-changing website, and local state-by-state directions. Among other things, farmers were to spray only when winds were at least 3 miles per hour, but no more than 15 (now 10) miles per hour, significantly narrowing the window for timely application, particularly for farmers with many and/or geographically disbursed acres to spray. The label also stated that XtendiMax should not be sprayed during a temperature inversion, a phenomenon difficult to predict. It also must be sprayed no higher than 24 inches above the crops, using nozzles designed to produce coarse/ultra-coarse (larger) droplets. There are restrictions on the pattern of the spray and the pounds per square inch of pressure. Restrictions vary according to crop.

169. In addition, Monsanto knew, and was warned, that many of the user instructions are contrary to typical user practices. At an August 8, 2016 Arkansas Pesticide Committee meeting, Boyd Carey from Monsanto acknowledged that "there are things [in the instructions] that are different than typical practices today." Arkansas Pesticide Committee Meeting (Aug. 8, 2016), https://monsanto.com/app/uploads/2017/11/Ex.-T.pdf.

170. For example, course/ultra-course nozzles, producing larger droplet size, generally are understood by farmers as detrimental to coverage. The 24-inch boom height is lower that most farmers run their boom. Speed of the sprayer, while affecting spray pressure, also affects the number of acres that can be covered in a given time span. As one person attending an August 8, 2016 Arkansas Pesticide Committee Meeting said to Monsanto: "You're dealing with real people who have to fight the clock . . . We got guys with eight, 10,000 acres who have four planters, 30-foot long[,] 25 foot long because they have to plant it as quick as they can plant it because it's limited. They either lose their moisture or it turns to mud. That's what we're dealing with. We're not dealing with theory or drawing board things. That's why the problem with Dicamba is serious." Arkansas Pesticide Committee Meeting Minutes (Aug. 8, 2016), https://monsanto.com/app/uploads/2017/11/Ex.-T.pdf.

171. Dr. Bob Hartzler, Professor of Agronomy and Extension Weed Specialist for Iowa State University, commented that the restrictions in the XtendiMax label "is unlike anything that's ever been seen before." Tom Polansek & Karl Plume, *U.S. farmers confused by Monsanto weed killer's complex instructions* (Aug. 21, 2017), https://www.reuters.com/article/us-usa-pesticides-labels/u-s-farmers-confused-by-monsanto-weed-killers-complex-instructions-idUSKCN1B110K.

172. Larry Steckel, a weed scientist in Tennessee, is quoted as saying that "it's almost impossible" to follow label directions for dicamba-based herbicides. Dan Nosowitz, *Farmers Say It's Nearly Impossible to Follow Monsanto's Dicamba Directions*, (Aug. 25, 2017) https://modernfarmer.com/2017/08/farmers-say-nearly-impossible-follow-monsantos-dicamba-directions/.

173. Not only did Monsanto recognize the difficulties in conditions and application, but the need for rigorous education and training on the risks of dicamba sprayed over the top of growing plants and proper manner of application. At the August 8, 2018 Arkansas Pesticide Committee meeting, Duane Simpson from Monsanto acknowledged that application instructions were "going to take a lot of training, understanding, and respect to do this correctly." Arkansas Pesticide Committee Meeting Minutes (Aug. 8, 2016) https://monsanto.com/app/uploads/2017/11/Ex.-T.pdf. Sufficient effective education and training, however, were not provided.

174. Moreover, Monsanto, which enters into agreements with those purchasing its seeds, could have made dicamba-specific application training a requirement of purchasing seed with the dicamba-resistant trait, but did not.

175. Neither was any special certification required for application of the "VaporGrip" Xtend and FeXapan or Engenia herbicides.

176. Monsanto knew or should have known that even conscientious applicators would have significant difficulty with the instructions and restrictions for in-crop dicamba.

177. Even a very small amount of drift can result in extensive damage to susceptible non-resistant crops.

178. It has been estimated that while one-eighth of a quart of glyphosate "will cause 20 percent damage to susceptible vegetation . . . you get 20 percent damage at one-fifteen-hundredth of a pint of dicamba." According to Steckel, "That's a game changing difference." Elton Robinson, *New Herbicide Tech Demands New Nozzle Thinking – 10 Quick Points*, http://agfaxweedsolutions.com/2017/01/12/new-herbicide-tech-demands-new-nozzle-thinking-10-quick-points/ (last visited Dec. 19, 2017).

179. Monsanto knew or should have known that in-crop use of dicamba would result in dicamba damage to susceptible, non-resistant crops.

180. Monsanto aggressively marketed a dicamba crop system knowing that dicamba could not be safely used in-crop and carries significant and serious risk to farmers growing crops not tolerant to dicamba.

181. It was foreseeable to Monsanto, and highly probable, that injury to farmers growing susceptible non-resistant crops such as Plaintiffs would occur.

182. Monsanto had a duty of care to not create, or continue, an unreasonable risk of harm to Plaintiffs.

183. Because of the inherent and high risk of widespread harm associated with dicamba, Monsanto had a duty to exercise the highest degree of care in its commercialization of dicamba-resistant seed.

184. At a minimum, however, Monsanto had a duty to exercise ordinary care to exercise precaution commensurate with the dangers to be reasonably anticipated under the circumstances.

185. Rather than exercise even ordinary care, Monsanto did just the opposite, widely commercializing dicamba-resistant seed specifically intended for use with an inadequately tested

and highly volatile herbicide seriously dangerous to susceptible non-resistant crops, and in a manner most likely to cause damage, including aggressive marketing, licensing, and unlimited release of a much-touted crop system into areas such as Missouri with significant pigweed, resulting in foreseeably heavy use of dicamba under circumstances including common occurrence of weather inversions, uncertified applicators, foreseeable difficulty of directions, lack of adequate education and training, and heavy planting of highly susceptible crops, creating high probability of off-target movement and damage to non-resistant crops.

186. Monsanto breached its duty of care.

187. As a direct and proximate result, Plaintiffs were damaged.

188. Monsanto's conduct showed a complete indifference to or conscious disregard of the rights of others, including Plaintiffs. Punitive damages are thus warranted.

COUNT III - STRICT LIABILITY
DEFECTIVE DESIGN

In the alternative to Counts I-II, Plaintiffs assert this Count III for design defect strict liability.

189. Plaintiffs incorporate by reference Paragraphs 1 - 140 as though fully alleged herein.

190. Monsanto, in the course of its business, developed, sold, licensed, and distributed soybean and cotton seed genetically modified for tolerance to dicamba specifically for use with dicamba sprayed over the top of growing plants.

191. The seed was designed and sold by Monsanto as part of a crop system in which dicamba herbicide is sprayed over the top of growing plants in the same areas as non-resistant plants also emerging and highly susceptible to dicamba.

192. When put to this reasonably anticipated use, the seed and crop system are unreasonably dangerous as dicamba volatilizes, and drifts, resulting in off-target movement and harm to susceptible non-resistant crops.

193. The seed, as so designed and used, was in defective condition unreasonably dangerous at the time of sale. This is true even if dicamba application involved user error or misuse, which was objectively foreseeable.

194. Moreover, Monsanto designed, marketed, affirmatively promoted and sold its dicamba-resistant seed for the purpose of use with in-crop dicamba herbicide as an integrated dicamba-based crop system unreasonably dangerous for the reasons herein described.

195. As a direct result of the defective condition of the seed, as sold for post-emergence use of dicamba herbicide, Plaintiffs were damaged.

COUNT IV - TRESPASS

In addition or in the alternative to Counts I-III, Plaintiffs assert this Count IV for trespass.

196. Plaintiffs incorporate by reference Paragraphs 1 - 140 as though fully alleged herein.

197. Monsanto intentionally developed, promoted, marketed and sold genetically modified soybean and cotton seed for and with the express purpose of allowing and encouraging others to spray dicamba herbicide over the top of crops grown from that seed.

198. Monsanto intentionally promoted and encouraged use of in-crop herbicide, including its own XtendiMax brand, FeXapan, sold under DuPont's brand name FeXapan, and Engenia, sold by BASF. Monsanto marketed, promoted, and encouraged use of dicamba over the top of growing plants as part of a "crop system" for use with Monsanto's dicamba-resistant seed.

199. Monsanto intentionally sold genetically modified dicamba-resistant seed directly, and through agreements in which it has financial interest, into areas it knew were planted with non-resistant crops highly sensitive to dicamba and with knowledge not only that dicamba would be sprayed over the top of emerging resistant soybean and cotton as intended by Monsanto, but had and would move off-target onto property without permission of rightful owners and possessors, including Plaintiffs.

200. Dicamba entered and was deposited upon property of which Plaintiffs have possession and without Plaintiffs' permission.

201. Monsanto knew that such intrusion would, to a substantial degree of certainty, result from its acts.

202. In addition, Monsanto promoted, aided, abetted, assisted, and contributed to the commission of a trespass.

203. Such invasion interfered with Plaintiffs' right of exclusive possession and caused substantial damage to their property.

204. As a result, Plaintiffs were damaged.

205. Monsanto's conduct showed a complete indifference to or conscious disregard of the rights of others, including Plaintiffs. Punitive damages are thus warranted.

Respectfully Submitted,

By: /s/ Don M. Downing
Gray, Ritter & Graham, P.C.
Don M. Downing, #30405 MO
Gretchen Garrison #33963 MO
Jason Sapp #58511 MO
Kaitlin Bridges #60861 MO
Jack Downing #70034 MO
701 Market Street, Suite 800
St. Louis, MO 63101
Tel: 314-241-5620

Fax: 314-241-4140
ddowning@grgpc.com
ggarrison@grgpc.com
jsapp@grgpc.com
kbridges@grgpc.com
jdowning@grgpc.com

IN THE CIRCUIT COURT OF MISSISSIPPI COUNTY
STATE OF MISSOURI

MCIVAN JONES FARMS, INC., STEVE JACKSON AND VICKIE JACKSON (PARTNERS OF V&S JACKSON FARMS), on behalf of themselves and others similarly situated	)	
Plaintiffs,	)	Case No. _____
v.	)	JURY TRIAL DEMANDED
MONSANTO COMPANY,	)	
Defendant.	)	

PLAINTIFFS' MOTION FOR SPECIAL PROCESS SERVER

COMES NOW Plaintiff, by and through counsel, and hereby moves for the appointment of Markell & Associates, Inc., 2300 Westport Plaza Dr., Suite 202, St. Louis, MO 63146 as special process server in the above-captioned matter for the purpose of serving the summons on defendant Monsanto Company. The process servers at Markell & Associates, Inc. are over the age of eighteen and are not parties to this action.

DATED: December 27, 2017

Respectfully Submitted,

By: /s/ Don M. Downing
Gray, Ritter & Graham, P.C.
Don M. Downing, #30405 MO
Gretchen Garrison #33963 MO
Jason Sapp #58511 MO
Kaitlin Bridges #60861 MO
Jack Downing #70034 MO
701 Market Street, Suite 800
St. Louis, MO 63101
Tel: 314-241-5620
Fax: 314-241-4140

ddowning@grgpc.com
ggarrison@grgpc.com
jsapp@grgpc.com
kbridges@grgpc.com
jdowning@grgpc.com

IN THE CIRCUIT COURT OF MISSISSIPPI COUNTY
STATE OF MISSOURI

MCIVAN JONES FARMS, INC., STEVE JACKSON AND VICKIE JACKSON (PARTNERS OF V&S JACKSON FARMS), on behalf of themselves and others similarly situated	)	
Plaintiffs,	)	Case No. 17MI-CV00761
v.	)	JURY TRIAL DEMANDED
MONSANTO COMPANY,	)	
Defendant.	)	

PLAINTIFFS' MOTION FOR SPECIAL PROCESS SERVER

COMES NOW Plaintiff, by and through counsel, and hereby moves for the appointment of Mark B. Smith of Markell & Associates, Inc., 2300 Westport Plaza Dr., Suite 202, St. Louis, MO 63146 as special process server in the above-captioned matter for the purpose of serving the summons on defendant Monsanto Company. The process servers at Markell & Associates, Inc. are over the age of eighteen and are not parties to this action.

DATED: December 28, 2017

Respectfully Submitted,

By: /s/ Don M. Downing
Gray, Ritter & Graham, P.C.
Don M. Downing, #30405 MO
Gretchen Garrison #33963 MO
Jason Sapp #58511 MO
Kaitlin Bridges #60861 MO
Jack Downing #70034 MO
701 Market Street, Suite 800
St. Louis, MO 63101
Tel: 314-241-5620
Fax: 314-241-4140

ddowning@grgpc.com
ggarrison@grgpc.com
jsapp@grgpc.com
kbridges@grgpc.com
jdowning@grgpc.com

IN THE CIRCUIT COURT OF MISSISSIPPI COUNTY
STATE OF MISSOURI

MCIVAN JONES FARMS, INC., STEVE JACKSON AND VICKIE JACKSON (PARTNERS OF V&S JACKSON FARMS), on behalf of themselves and others similarly situated	)	
Plaintiffs,	)	Case No. 17MI-CV00761
v.	)	JURY TRIAL DEMANDED
MONSANTO COMPANY,	)	
Defendant.	)	

ORDER TO APPOINT SPECIAL PROCESS SERVER

IT IS HEREBY ORDERED, that Mark B. Smith of Markell & Associates, Inc., 2300 Westport Plaza Dr., Suite 202, St. Louis, MO 63146 is authorized to effectuate service of process of the summons on defendant Monsanto Company.

DATED: 12/28/2017

SO ORDERED:

Judge David A. Dolan

CIRCUIT COURT SEAL MISSISSIPPI COUNTY, MO

FILED
DEC 28 2017
CIRCUIT COURT
MISSISSIPPI COUNTY, MO

IN THE 33RD JUDICIAL CIRCUIT COURT, MISSISSIPPI COUNTY, MISSOURI

Judge or Division: DAVID ANDREW DOLAN	**Case Number: 17MI-CV00761**
Plaintiff/Petitioner: MCIVAN JONES FARMS, INC. vs.	Plaintiff's/Petitioner's Attorney/Address DON MANLEY DOWNING 701 MARKET STREET SUITE 800 ST. LOUIS, MO 63101-1826
Defendant/Respondent: MONSANTO COMPANY - ST LOUIS	Court Address: P.O. BOX 369 CHARLESTON, MO 63834
Nature of Suit: CC Other Tort	(Date File Stamp)

Summons in Civil Case

The State of Missouri to: MONSANTO COMPANY - ST LOUIS
Alias:

800 N LINDBERG
ST LOUIS, MO 63167

COURT SEAL OF CIRCUIT COURT OF MISSOURI *MISSISSIPPI COUNTY*

You are summoned to appear before this court and to file your pleading to the petition, a copy of which is attached, and to serve a copy of your pleading upon the attorney for Plaintiff/Petitioner at the above address all within 30 days after receiving this summons, exclusive of the day of service. If you fail to file your pleading, judgment by default may be taken against you for the relief demanded in the petition.

12-28-2017
Date

Dottie McKenzie
Clerk

Further Information:

Sheriff's or Server's Return

Note to serving officer: Summons should be returned to the court within thirty days after the date of issue.

I certify that I have served the above summons by: (check one)

☐ delivering a copy of the summons and a copy of the petition to the Defendant/Respondent.

☐ leaving a copy of the summons and a copy of the petition at the dwelling place or usual abode of the Defendant/Respondent with _____ a person of the Defendant's/Respondent's family over the age of 15 years.

☐ (for service on a corporation) delivering a copy of the summons and a copy of the petition to _____ (name) _____ (title).

☐ other _____.

Served at _____ (address)

in _____ (County/City of St. Louis), MO, on _____ (date) at _____ (time).

_____ Printed Name of Sheriff or Server

_____ Signature of Sheriff or Server

Must be sworn before a notary public if not served by an authorized officer:

Subscribed and sworn to before me on _____ (date).

(Seal)

My commission expires: _____ Date

_____ Notary Public

Sheriff's Fees

Summons	$_____
Non Est	$_____
Sheriff's Deputy Salary	
Supplemental Surcharge	$ 10.00
Mileage	$_____ (_____ miles @ $_____ per mile)
Total	$_____

A copy of the summons and a copy of the petition must be served on **each** Defendant/Respondent. For methods of service on all classes of suits, see Supreme Court Rule 54.

IN THE 33RD JUDICIAL CIRCUIT COURT, MISSISSIPPI COUNTY, MISSOURI

Judge or Division: DAVID ANDREW DOLAN	**Case Number: 17MI-CV00761**
Plaintiff/Petitioner: MCIVAN JONES FARMS, INC. vs.	Plaintiff's/Petitioner's Attorney/Address DON MANLEY DOWNING 701 MARKET STREET SUITE 800 ST LOUIS, MO 63101-1826
Defendant/Respondent: MONSANTO COMPANY - ST LOUIS	Court Address: P.O. BOX 369 CHARLESTON, MO 63834
Nature of Suit: CC Other Tort	(Date File Stamp)

Summons in Civil Case

The State of Missouri to: MONSANTO COMPANY - ST LOUIS
Alias:

800 N LINDBERG
ST LOUIS, MO 63167

COURT SEAL OF CIRCUIT COURT OF MISSOURI *MISSISSIPPI COUNTY*

You are summoned to appear before this court and to file your pleading to the petition, a copy of which is attached, and to serve a copy of your pleading upon the attorney for Plaintiff/Petitioner at the above address all within 30 days after receiving this summons, exclusive of the day of service. If you fail to file your pleading, judgment by default may be taken against you for the relief demanded in the petition.

12-28-2017
Date

Dottie McKenzie
Clerk

Further Information:

Sheriff's or Server's Return

Note to serving officer: Summons should be returned to the court within thirty days after the date of issue.

I certify that I have served the above summons by: (check one)

☐ delivering a copy of the summons and a copy of the petition to the Defendant/Respondent.

☐ leaving a copy of the summons and a copy of the petition at the dwelling place or usual abode of the Defendant/Respondent with _____ a person of the Defendant's/Respondent's family over the age of 15 years.

☐ (for service on a corporation) delivering a copy of the summons and a copy of the petition to _____ (name) _____ (title).

☐ other _____.

Served at _____ (address)

in _____ (County/City of St. Louis), MO, on _____ (date) at _____ (time).

_____ Printed Name of Sheriff or Server

_____ Signature of Sheriff or Server

Must be sworn before a notary public if not served by an authorized officer:

(Seal)

Subscribed and sworn to before me on _____ (date).

My commission expires: _____ Date

_____ Notary Public

Sheriff's Fees

Summons	$_____
Non Est	$_____
Sheriff's Deputy Salary	
Supplemental Surcharge	$ 10.00
Mileage	$_____ (_____ miles @ $._____ per mile)
Total	$_____

A copy of the summons and a copy of the petition must be served on **each** Defendant/Respondent. For methods of service on all classes of suits, see Supreme Court Rule 54.

IN THE CIRCUIT COURT OF MISSISSIPPI COUNTY
STATE OF MISSOURI

MCIVAN JONES FARMS, INC., STEVE JACKSON AND VICKIE JACKSON (PARTNERS OF V&S JACKSON FARMS), on behalf of themselves and others similarly situated	)	
Plaintiffs,	)	Case No. 17MI-CV00761
v.	)	
MONSANTO COMPANY,	)	
Defendant.	)	

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on January 2nd, 2018, a true and correct copy of Plaintiffs' First Request for Production of Documents to Defendant Monsanto Company, along with a CD ROM, was served, together with the petition, by hand delivery on:

CSC of St. Louis County, Inc.,
Registered Agent of Monsanto Company
130 South Bemiston Avenue
Suite 700
Clayton, MO 631605

/s/ Don M. Downing
Attorney for Plaintiffs

Respectfully Submitted,

By: /s/ Don M. Downing
Gray, Ritter & Graham, P.C.
Don M. Downing, #30405 MO
Gretchen Garrison #33963 MO
Jason Sapp #58511 MO
Kaitlin Bridges #60861 MO

Jack Downing #70034 MO
701 Market Street, Suite 800
St. Louis, MO 63101
Tel: 314-241-5620
Fax: 314-241-4140
ddowning@grgpc.com
ggarrison@grgpc.com
jsapp@grgpc.com
kbridges@grgpc.com
jdowning@grgpc.com

IN THE CIRCUIT COURT OF MISSISSIPPI COUNTY
STATE OF MISSOURI

MCIVAN JONES FARMS, INC., STEVE JACKSON AND VICKIE JACKSON (PARTNERS OF V&S JACKSON FARMS), on behalf of themselves and others similarly situated	)	
Plaintiffs,	)	Case No. 17MI-CV00761
v.	)	JURY TRIAL DEMANDED
MONSANTO COMPANY,	)	
Defendant.	)	

CERTIFICATE OF SERVICE

I hereby certify that on January 3rd, 2018, I caused to be electronically filed the foregoing Certificate of Service using the CM/ECF system.

Respectfully Submitted,

By: /s/ Don M. Downing
Gray, Ritter & Graham, P.C.
Don M. Downing, #30405 MO
Gretchen Garrison #33963 MO
Jason Sapp #58511 MO
Kaitlin Bridges #60861 MO
Jack Downing #70034 MO
701 Market Street, Suite 800
St. Louis, MO 63101
Tel: 314-241-5620
Fax: 314-241-4140
ddowning@grgpc.com
ggarrison@grgpc.com
jsapp@grgpc.com
kbridges@grgpc.com
jdowning@grgpc.com

IN THE CIRCUIT COURT OF MISSISSIPPI COUNTY
STATE OF MISSOURI

MCIVAN JONES FARMS, INC., STEVE JACKSON AND VICKIE JACKSON (PARTNERS OF V&S JACKSON FARMS), on behalf of themselves and others similarly situated	)	
Plaintiffs,	)	Case No. 17MI-CV00761
v.	)	JURY TRIAL DEMANDED
MONSANTO COMPANY,	)	
Defendant.	)	

FIRST AMENDED CLASS ACTION PETITION

Plaintiffs submit this First Amended Petition, on behalf of themselves and those similarly situated, for damages against Defendant Monsanto Company ("Monsanto"), and allege as follows:

1. This action is brought by persons who have suffered damage as a result of Monsanto' development, promotion, and sale of a dicamba-resistant seed trait, which is specifically intended to be, and is, part of a weed control system in which dicamba herbicide is applied over the top of growing plants.

PARTIES

2. McIvan Jones Farms, Inc. is a corporation organized, and with its principal place of business, in Missouri that farms land on which it grows soybeans in Mississippi County, Missouri.

3. Steve Jackson and Vickie Jackson, residents of Missouri, are partners of V&S Jackson Farms, who farm land on which they grow soybeans in Dunklin County, Missouri.

4. Monsanto is a corporation organized and existing under the laws of the State of Delaware with its corporate headquarters and principal place of business in St. Louis County, Missouri.

5. Monsanto developed, licenses and sells a genetically engineered trait in soybean and cotton seed that confers resistance to dicamba. Monsanto licenses and sells the trait, and also sells seed containing such trait, in Missouri for intended use with dicamba herbicide manufactured and sold by Monsanto and other companies.

JURISDICTION AND VENUE

6. This Court has personal jurisdiction over Monsanto because it is registered to conduct business in Missouri, has its principal place of business and headquarters in Missouri at 800 N. Lindbergh Blvd., Saint Louis, Missouri, is present and transacts substantial business in Missouri, has a registered agent in Missouri, consistently and purposefully avails itself of the privileges of conducting business in Missouri and can fairly be regarded as at home in Missouri. Moreover, Monsanto itself or through an agent entered into contracts in Missouri, committed tortious acts in Missouri, transacted business in Missouri, commercialized and sold dicamba-resistant seed in Missouri for use with dicamba herbicide in Missouri, which damaged Plaintiffs in Missouri.

7. Venue is proper in Mississippi County, Missouri pursuant to Mo. Rev. Stat. § 508.010.4 in that Plaintiff McIvan Jones Farms, Inc. was first injured in Mississippi County, Missouri.

FACTUAL BACKGROUND AND GENERAL ALLEGATIONS

A. Monsanto, Glyphosate, and Super Weeds

8. Monsanto was one of the first companies to utilize biotechnology in the field of agriculture, and has become a leading producer of genetically modified seed and agro-chemicals.

9. Biotechnology has made possible the introduction of genetic characteristics, or traits, into plant seeds.

10. In the 1970s, Monsanto patented the glyphosate molecule, which became the main ingredient in Roundup herbicide.

11. Glyphosate is a non-selective herbicide that causes severe injury or destruction to plants, including soybean and cotton, that have not been genetically modified to tolerate it.

12. Introduced in 1974, Roundup became one of the world's most widely used herbicides.

13. Monsanto also genetically engineered seed to withstand its glyphosate herbicide, sold under the brand name Roundup Ready ("RR").

14. It was Monsanto's development and sale of the glyphosate-tolerant trait that changed how farmers could apply glyphosate herbicide. Rather than being applied before the crop is planted (in the "burn-down" stage), Roundup can be sprayed over the top of growing crops genetically modified to withstand it. As a result, farmers planting glyphosate-tolerant crops can apply it over an entire field, after the crop has emerged without damage to the crop itself. Over-the-top application of glyphosate is now commonplace.

15. Monsanto began selling RR soybean seed in 1996 and RR corn seed in 1998. Other crops genetically altered to withstand Roundup herbicide include canola, cotton, alfalfa, and sugar beets.

16. The Roundup Ready crop system became Monsanto's flagship. Monsanto's Roundup herbicide and RR seed each supported the other, becoming a blockbuster combination.

17. The glyphosate-resistant trait is a technology that Monsanto patented, owns and licenses. A farmer cannot obtain Monsanto technology without buying the seed into which it has been inserted.

18. Until 2015, Monsanto held the patent on its "first generation" Roundup Ready ("RR1") trait.

19. Well before Monsanto's patent on its original RR technology expired in 2015, Monsanto patented a "second generation" Roundup Ready ("RR2") trait, which expresses the same enzyme that confers glyphosate resistance as before.

20. Monsanto charges more for its RR2Yield soybean seed than its original RR1 soybean seed, marketing it as having better yield, which it does not as compared to RR1 and/or other varieties.

21. More than ninety percent of soybeans and approximately eighty percent of corn and cotton are grown from seed containing Monsanto's RR trait.

22. As of 2016, glyphosate had become the most-used agricultural chemical ever.

23. Weeds, however, have evolved to become naturally resistant to glyphosate. These glyphosate-resistant weeds are known as "super weeds."

24. Monsanto's sale and distribution of Roundup set in motion a dangerous cycle whereby weeds evolve to resist the chemicals designed to destroy them, forcing farmers to apply higher doses or use different herbicides.

25. Monsanto's RR trait and glyphosate herbicide directly contributed to this problem. All the while, Monsanto has made massive profits.

B. Development of the Dicamba-based Crop System

26. Recognizing the opportunity to protect and enhance its dominance with RR, and to capitalize on and dominate the market with a new trait to address the weed problem its own Roundup products produced, Monsanto set out to develop a crop system featuring dicamba, an exceptionally volatile and damaging herbicide.

27. According to Monsanto President, Brett Begemann, this new crop system will provide Monsanto "a source of growth longer term." Carey Gillam, *Monsanto to invest more than $1 bln in dicamba herbicide production* (June 24, 2015), https://www.reuters.com/article/monsanto-dicamba/monsanto-to-invest-more-than-1-bln-in-dicamba-herbicide-production-idUSL1N0ZA1XN20150624.

28. Dicamba is a broad-spectrum systemic herbicide that destroys broadleaf weeds and plants.

29. Dicamba mimics the plant hormone auxin, causing uncontrolled cell division and growth, causing the plant to grow so fast that it cannot retain the nutrients it requires, which kills the plant.

30. Certain plants are extremely sensitive to dicamba, even in trace amounts, including soybeans and cotton.

31. It is well known to agro-chemical companies like Monsanto that dicamba has extreme negative effects on desirable broad-leaf plants, including trees, fruits, vegetables, and various crops, especially soybeans.

32. A healthy soybean plant will produce fully-developed pods and leaves throughout the stem of the plant. A soybean plant damaged by dicamba suffers significant loss of pods

throughout the stem, reduced number of beans per pod, and discoloration and cupping of the leaves of the plant.

33. Dicamba also has long been recognized as extremely volatile, meaning that it has a high propensity to evaporate, or vaporize, from soil and/or plant surfaces then move as vapor through the air to other plants. Vaporized dicamba can travel great distances before falling onto and damaging desirable off-target plants, including non-resistant crops.

34. In addition, dicamba's volatility is long-lived, meaning longer exposure for non-tolerant plants and increased risk of movement.

35. Dicamba has been on the market in various forms since the 1960s, but for all these reasons, historically has been used in pre-planting or post-harvest burndown. Because there are typically no neighboring crops to damage during burndown, it is relatively safe to apply even highly volatile chemicals, such as dicamba, during this stage.

36. Monsanto, however, wanted a dicamba herbicide that, unlike before, and similar to glyphosate, could be applied "in-crop," in other words, over the top of growing plants.

37. In order to apply dicamba in this manner so as to kill unwanted weeds but not the crop, Monsanto, by at least 2008, had begun development of seed genetically modified to provide tolerance not only to glyphosate but also to dicamba.

38. Monsanto's genetically engineered trait for soybean and cotton seed to withstand dicamba was developed and later sold expressly for the purpose of use with dicamba herbicide. There is no reason for, or value in, genetic modification to tolerate dicamba herbicide except for use of such herbicide.

39. Monsanto's development of a genetically engineered trait of resistance to dicamba for use with dicamba sprayed "in-crop," or over the top of crops after emergence from the

ground, meant that dicamba would be sprayed much later in the year than before – in months that are hot and humid – and in the vicinity of susceptible non-resistant crops also emerging and at high risk for damage by dicamba.

40. Monsanto aggressively advertised and touted what became the Roundup Ready Xtend Crop System ("Xtend Crop System"), designed for and consisting of dicamba-resistant seed and dicamba herbicide.

41. Monsanto has long considered – and marketed – the dicamba-resistant seed trait and dicamba herbicide as an integrated system of weed control. Monsanto promotes its "Xtend Crop System" as "comprised of both seed and herbicide solutions." *The Next Step in Weed Management*, https://www.roundupreadyplus.com/Content/assets/docs/forum/NeedToKnow_RoundupReadyXtendCropSystem.pdf (last visited Dec. 19, 2017).

42. Monsanto not only promoted its own development of resistant-seed/dicamba-herbicide crop system, but actively and affirmatively encouraged, promoted, and collaborated with other companies to further it.

43. Monsanto entered into agreements with competitors, including chemical company BASF Corporation ("BASF") and E.I. DuPont De Nemours and Company ("DuPont") or their affiliates to create, accelerate, and promote a dicamba-based crop system, with its own dicamba-resistant trait as the centerpiece.

44. Monsanto and BASF entered into agreements to collaborate in the development of such a system, consisting of the dicamba-resistant seed trait to be supplied by Monsanto, and in-crop dicamba herbicide to be supplied by both Monsanto and BASF.

45. In or prior to 2009, Monsanto and BASF entered into one or more agreements to collaborate and accelerate new traits and products, under joint budget and with profits from commercialized products shared, with Monsanto receiving 60% of net profits.

46. In January 2009, Monsanto and BASF announced a joint-licensing agreement to accelerate use of dicamba-based weed control products, both participating in development of formulations of dicamba to be used with Monsanto's dicamba-resistant seed trait.

47. In a joint press release on November 2, 2010, Monsanto and BASF announced "significant progress toward launching next-generation dicamba-based weed control systems for soybeans and cotton." Joint Press Release, *BASF and Monsanto Announce Progress in Dicamba Formulations* (Nov. 2, 2010), https://monsanto.com/news-releases/basf-and-monsanto-announce-progress-in-dicamba-formulations/.

48. Kerry Preete, Monsanto vice president of crop protection, stated: "Together the strength of the formulation expertise BASF has with dicamba and our team's biotech focus seeks to deliver another breakthrough product in weed control." *Id.*

49. Markus Heldt, president of BASF's Crop Protection division, stated: "The dicamba tolerant system is designed [to] give growers pre- and post-emergence application flexibility, allowing them to better manage their resources and thus improving productivity." *Id.*

50. In joint press releases, Monsanto and BASF stated that they had agreed to "collaborate on the advancement of dicamba tolerant cropping systems. The companies have granted reciprocal licenses and BASF has agreed to supply formulated dicamba herbicide products to Monsanto." *See* Joint Press Release, *BASF and Monsanto Take Dicamba Tolerant Cropping System Collaboration to the Next Level* (March 14, 2011), https://monsanto.com/news-

releases/basf-and-monsanto-take-dicamba-tolerant-cropping-system-collaboration-to-the-next-level/.

51. Robb Fraley, Monsanto's chief technology officer, stated: "Our work with BASF brings us one step closer to bringing more improved weed control offerings to farmers. We expect the formulations to be an excellent complement to Monsanto's dicamba tolerant seed technologies when they are brought to market." *Id.*

52. Monsanto and BASF conducted joint field testing of dicamba-based formulations applied over the top of Monsanto's dicamba-tolerant soybean technology in development, and also said their collaboration included joint development of stewardship, education programs and best practices to "support long term sustainability" of a dicamba-tolerant system. *Monsanto and BASF Yield-and-Stress Collaboration Field Tour Monmouth Research Facility*, August 8, 2011, https://www.basf.com/documents/corp/en/investor-relations/calendar-and-publications/calendar/2011/roundtable_agricultural/ 110808_Agro_Roundtable_2011_Tour.pdf.

53. From the early stages of Monsanto's development of a crop system using dicamba, weed scientists and others warned of harm from large-scale dicamba use in summer months.

54. Among concerns expressed early on, scientists from Ohio State University addressed a conference in Columbus in October 2011 focused on dicamba. Representatives of Monsanto and BASF were in attendance. Douglas Doohan, a conference organizer, and his colleagues outlined the risk of unapproved spraying of older dicamba versions when dicamba-resistant seed became available and also that damage to other crops would lead farmers to buy dicamba-tolerant seed to protect themselves. Emily Flitter, Reuters, The story behind Monsanto's sprawling herbicide crisis (Nov. 10, 2017),

http://www.provmweb.com/news/a05a1/www.provmweb.com/news/a05a1/the-story-behind-monsantos-sprawling-herbicide-crisis.

55. On April 29, 2010, Monsanto applied to the Environmental Protection Agency (EPA) for registration of M-1691 Herbicide, a diglycolamine (DGA) salt of dicamba (a formulation previously sold by BASF as Clarity herbicide), supposedly less volatile than older formulations.

56. On July 30, 2012, Monsanto applied for EPA registration of M-1768 Herbicide, also a DGA dicamba salt, this time with "VaporGrip® Technology," a technology that supposedly further lowered volatility, for use post-emergence, or over-the-top, of genetically-modified dicamba-resistant soybeans and cotton.

57. Dupont / Pioneer is a leading developer, producer, and marketer of soybean and corn seed, and historically, a competitor of Monsanto both as a developer of seed varieties and a developer of genetic traits.

58. Prior to 2013, Monsanto and DuPont had been embroiled in litigation concerning Pioneer's use of Monsanto's technology and claims by DuPont that Monsanto engaged in various anti-competitive behavior.

59. Shortly after a large jury award to Monsanto on its claims against DuPont for patent infringement, and with DuPont's anti-trust claims still pending, Monsanto and DuPont announced in 2013 that they would enter into a deal under which Monsanto would waive the verdict and DuPont would dismiss its anti-trust claims and pay some $1.75 billion in royalties in exchange for access to Monsanto's genetic technology, including RR and dicamba resistance.

60. Monsanto entered into technology licensing agreements with DuPont under which DuPont, for additional royalties, could market and sell soybean seed containing Monsanto's

RR2Yield, as well as Monsanto's dicamba resistance technology. Joint Press Release, *DuPont and Monsanto Reach Technology Licensing Agreements on Next-Generation Soybean Technologies* (March 26, 2013), https://www.pioneer.com/home/site/about/news-media/news-releases/template.CONTENT/ guid.EAB5E402-FECE-0123-144E-CBC62A6D8513

61. Brett Begemann, Monsanto president and chief commercial officer, stated that the agreement "signals a new approach to our companies doing business together . . . ." Andrew Pollack, *Monsanto and DuPont Settle Fight Over Patent Licensing* (March 26, 2013), http://www.nytimes.com/2013/03/27/business/monsanto-and-dupont-settle-fight-over-roundup-ready-technology.html.

62. The price of seed containing Monsanto's genetic modification for dicamba resistance is more than seed without it. For example, included among Monsanto's "Key Metrics and Platform Drivers" is that its Xtend technology would carry a $5-10/acre premium over RR2Yield varieties. *See* Robb Fraley Citi's 2015 Basic Material Conference (Dec. 2, 2015), https://monsanto.com/app/uploads/2017/05/citi_fraley_2015.12.02.pdf; Monsanto Company Fourth quarter FY 2016 Earnings Call (Oct. 5, 2016), https://monsanto.com/app/uploads/2017/05/2016.10.5_MON_Q4F16_Financial_Results.pdf.

63. There is no benefit to the Xtend trait other than resistance to dicamba, and no benefit to dicamba resistance other than use of dicamba herbicide.

C. Dicamba Damage in 2015 and 2016

64. Monsanto's dicamba-resistant soybean and cotton seed was deregulated by the USDA on or about January 14, 2015, meaning that there would be no further regulation by that agency.

65. At that point, however, there was no registration, from the EPA for any "low" volatility dicamba for use over the top of growing plants.

66. Monsanto had a decision to make: wait to sell its dicamba-resistant seed until the EPA registered the supposed "low" volatility dicamba, or sell that seed without corresponding "low-volatility" dicamba herbicide approved for in-crop use. Monsanto chose profit and advancement of its own interests over the harm to others that inevitably would occur.

67. Monsanto commercialized Bollgard II XtendFlex Cotton ("XtendFlex Cotton") for the 2015 growing season. Monsanto rolled out its new, XtendFlex Cotton for a "limited introduction" of 500,000 acres. It did so despite lack of approval for over-the-top dicamba.

68. Because the EPA had not yet registered the supposed "low-volatility" version of dicamba herbicide, farmers were unable to buy corresponding dicamba herbicide approved for in-crop use on XtendFlex Cotton.

69. Monsanto had been touting the supposed benefits of the Xtend Crop System for years, and aggressively promoted the new cotton seed.

70. Monsanto's public stance was that dicamba herbicides were not to be used over-the-top. Monsanto representatives, however, advised farmers to do just the opposite – to spray existing dicamba products over the top of their crops in 2015.

71. It otherwise was foreseeable that farmers would do so given that the very purpose for development of, and value in using, seed genetically modified for dicamba resistance is use of dicamba herbicide over the top.

72. Foreseeably, and as predicted, farmers did spray the older versions and damage to non-resistant crops occurred.

73. Monsanto knew or at minimum should have known that crop damage would occur as a direct result of its XtendFlex Cotton release in 2015.

74. Farmers did experience dicamba damage to their crops in 2015.

75. Again, Monsanto had a decision to make for the 2016 crop year. Again, it put its own financial interests ahead of safety and moved forward with commercialization of dicamba-resistant soybeans.

76. Monsanto's financial incentive to ignore clear warnings was and is enormous.

77. Monsanto's dicamba-resistant seed, on which use of in-crop dicamba herbicide depends, is a new flagship and core business growth driver for Monsanto.

78. As of 2015, Monsanto already had announced plans for the direct and licensed release of some 70 varieties of soybeans with the dicamba-resistant trait.

79. In an interview, Monsanto's Vice President of Global Strategy, Scott Partridge, stated that Monsanto had bred the dicamba-resistant trait into its entire stock of soybeans and the alternative to waiting would have been "to not sell a single soybean in the United States" that year. Emily Flitter, Special Report, *The decisions behind Monsanto's weed-killer crisis* (Nov. 9, 2017), https://uk.reuters.com/article/uk-monsanto-dicamba-specialreport/the-decisions-behind-monsantos-weed-killer-crisis-idUKKBN1D91Q9.

80. In addition, damage to non-resistant susceptible crops benefits Monsanto as it pressures and intimidates farmers into purchasing its technology for defensive reasons.

81. As with the 2015 release of XtendFlex Cotton, there was no dicamba herbicide approved for over-the-top use in 2016 when Monsanto commercialized its dicamba-resistant soybeans.

82. Nevertheless, and despite the prior year's damage from its XtendFlex Cotton, Monsanto proceeded with release of Roundup Ready 2 Xtend Soybeans ("Xtend Soybeans") for the 2016 growing season, telling farmers that approval of its new "low" volatility dicamba herbicide was "imminent." Monsanto Q1 2016 Results Earnings Call Transcript (Jan. 6, 2016), https://seekingalpha.com/article/3794576-monsanto-companys-mon-ceo-hugh-grant-q1-2016-results-earnings-call-transcript.

83. Monsanto even provided a $5/unit price reduction for the Xtend Soybeans in 2016 to entice sales. *See* Monsanto Whistle Stop Tour "Accelerating the Future of Agriculture," Day 1 Session (Aug. 17, 2016), https://monsanto.com/app/uploads/2017/05/whistle_stop_viii_day-1-session_materials.pdf.

84. DuPont/Pioneer also launched varieties of soybean with RR2 Xtend technology in 2016.

85. Again, as in 2015, it was foreseeable that farmers would spray older dicamba formulations over the top of dicamba-resistant crops, and that the sale of dicamba-resistant soybean seed and continued sale of dicamba-resistant cotton seed in 2016 would lead to further dicamba damage to non-dicamba-resistant crops.

86. Not only did damage result in 2016, it was on a much larger scale with both Monsanto's dicamba-resistant cotton and soybeans on the market.

87. Monsanto was well aware of numerous reports of dicamba damage during the 2016 crop year.

88. Monsanto's headlong drive to market was and is in reckless pursuit of gaining ever more market share through its new Xtend Crop System at the expense of innocent farmers.

89. In addition to soybeans and cotton, Monsanto also has petitioned the USDA for deregulation of a genetically modified dicamba-resistant corn.

D. Full-Scale Dicamba-System Rollout in 2017

90. EPA registration for the new herbicide did not come until after harvest in 2016.

91. On November 9, 2016, Monsanto received a two-year conditional registration from the EPA for its in-crop dicamba herbicide, which Monsanto commercialized under the trade name XtendiMax with VaporGrip Technology ("XtendiMax").

92. XtendiMax is intended for application over the top of soybean and cotton crops grown from seed containing Monsanto's dicamba-resistant technology.

93. Monsanto, which provided the EPA only with its own volatility studies, refused independent volatility testing of XtendiMax with "VaporGrip Technology." Monsanto repeatedly denied university requests to research volatility of the herbicide. While Monsanto did provide samples of XtendiMax to various universities, including the University of Missouri and the University of Arkansas, the samples came with contracts containing never-before-seen strict constraints which expressly prohibited volatility testing.

94. In January 2017, the Arkansas Joint Budget Committee met to discuss regulation of the new dicamba formulations. Discussion included Monsanto's repeated refusal to allow third-party testing of its "VaporGrip" technology, and that Monsanto's Boyd Carey was on record as saying that neither the University of Arkansas nor any other university would be allowed to test VaporGrip for fear that the results might jeopardize the federal label.

95. The new dicamba formulations otherwise were not adequately tested for sufficient time or under real-world conditions in areas in which they would be sold. Among other things, according to publicly available EPA documents, Monsanto field tested its XtendiMax with

"VaporGrip Technology" in only two locations – Texas and Georgia – involving specific soil types, only a few acres, and a limited time span. There was no modeling of large-scale spraying.

96. Notwithstanding warnings from weed scientists, and the crop damage that occurred in 2015 and 2016, the much-touted "Xtend Crop System," entailing seed containing Monsanto's dicamba-resistant technology and in-crop dicamba herbicide sold by Monsanto – as well as BASF and DuPont – became fully available for 2017.

97. On or about December 20, 2016, BASF also received a two-year conditional EPA registration for use of BASF's dicamba herbicide Engenia with seed containing Monsanto's Xtend technology.

98. Monsanto entered into agreements with DuPont allowing DuPont to utilize, market, and sell dicamba herbicide for in-crop use containing Monsanto's "VaporGrip Technology" under DuPont's trade name FeXapan.

99. Monsanto's licensing of its "VaporGrip" technology to companies like DuPont also is one of Monsanto's "Key Metrics and Platform Drivers." *See* Monsanto Fourth-Quarter FY2017 Earnings Presentation "Fiscal Year 2017 Results and Outlook" (Oct. 4, 2017), https://monsanto.com/app/uploads/2017/10/MonsantoCo._Q4F17_Earnings_Presentation_2017.10.04.pdf. That licensing, as well as BASF's sales of its own "low" volatility dicamba, were intended to and do further promote Monsanto's penetration of the market and increased sales of the dicamba-resistant trait on which over-the-top use of dicamba herbicide depends.

100. On or about February 16, 2017, DuPont received two-year conditional EPA registration for use of FeXapan with "VaporGrip Technology" with Monsanto's Xtend seed technology.

101. All these companies did and do market their in-crop dicamba herbicide as part of a crop system featuring Monsanto's dicamba-resistant Xtend seed technology.

102. Monsanto advertises and markets XtendiMax as a low-volatility dicamba formulation with "VaporGrip Technology," designed for use with dicamba-resistant seed trait sold and licensed only by Monsanto.

103. Monsanto has described XtendiMax as "[a]n integral component of the Roundup Ready® Xtend Crop System." *Roundup Ready Xtend Crop System Chemistry*, http://www.roundupreadyxtend.com/About/Chemistry/Pages/default.aspx (last visited Dec. 19, 2017).

104. BASF advertises and markets Engenia as a low-volatility dicamba formulation designed for use with the dicamba-resistant seed trait sold and licensed only by Monsanto, which BASF promotes in its own advertising as "Dicamba-tolerant soybean sold under the trait name Roundup Ready 2 Xtend Soybeans." *Introducing the Most Flexible and Advanced Dicamba for Dicamba-Tolerant Crops*, http://agproducts.basf.us/campaigns/engenia/assets/pdf/Engenia-Soybeans-National-TIB.pdf (last visited Dec. 19, 2017).

105. Monsanto and DuPont issued a joint press release in July 2016 regarding their multi-year dicamba supply agreement, which Mike Frank, Monsanto vice president, said "represent[ed] continued commitment to the Roundup Ready® Xtend Crop System." Joint Press Release, *Monsanto and DuPont Sign Dicamba Supply Agreement* (July 7, 2016), http://www.dupont.com/corporate-functions/media-center/press-releases/monsanto-dupont-sign-dicamba-supply-agreement.html (last visited Dec. 19, 2017).

106. DuPont advertises and markets FeXapan as a low-volatility dicamba formulation with "VaporGrip Technology" designed for use with the dicamba-resistant seed trait sold only by

Monsanto, which DuPont promotes as part of its own advertising as "part of the Roundup Ready 2 Xtend® Acre Solution." FeXapan™ Herbicide Plus Vaporgrip® Technology, http://www.dupont.com/products-and-services/crop-protection/soybean-protection/products/fexapan.html (last visited Dec. 19, 2017).

107. Monsanto sold and/or licensed, and farmers planted, seed containing Monsanto's dicamba-resistant trait on approximately 25 million acres of soybean and cotton fields in 2017.

108. DuPont offered more than 30 varieties of soybean seed with RR2 Xtend dicamba-resistant technology through its license with Monsanto.

109. Monsanto, as well as BASF and DuPont, promoted and represented the dicamba crop system with their supposed "low" volatility dicamba formulations as safe when it was not. For example, in a 2010 press release, Monsanto and BASF stated that they had made "significant progress toward launching next-generation dicamba-based weed control systems" and that the "new formulation work offers even further improvement in physical characteristics that result in better performance and safety to nearby crops." Joint Press Release, *BASF and Monsanto Announce Progress in Dicamba Formulations* (Nov. 2, 2010), https://monsanto.com/news-releases/basf-and-monsanto-announce-progress-in-dicamba-formulations/.

110. Even in 2017, Monsanto represented that its "VaporGrip" technology "significantly minimizes dicamba's volatility potential after spraying – provid[ing] growers and applicators confidence in on-target application of dicamba." *Significant Reduction in Volatility Potential,* https://www.roundupreadyxtend.com/About/vaporgriptechnology/Pages/default.aspx (last visited Dec. 19, 2017).

111. Notwithstanding such assurances, XtendiMax, Engenia and FeXapan still are volatile.

112. Monsanto knew or at minimum should have known that there is no formulation that reduces volatility in dicamba to a level at which it does not volatilize and move from the target application. In fact, any formulation that would eliminate volatility would make the herbicide ineffective.

113. Monsanto knew or should have known that the promotion, sale and licensing of its dicamba-resistant seed technology would result in increased use of dicamba herbicide, marketed for in-crop use during summer months when among other things, conditions such as temperature inversions occur most frequently and non-target crops have emerged that will be at imminent risk.

114. Temperature inversions exacerbate the risk of damage by volatilization.

115. A temperature inversion occurs where the air above the ground is warmer than the ground itself. An inversion layer forms where the warmer air is present, blocking atmospheric flow. This causes the air over the inversion layer to become very stable, trapping everything inside of the layer.

116. Temperature inversions can be difficult to predict and there are not a lot of reliable tools to detect an inversion event. Inversions also can occur after application of dicamba already has taken place.

117. Temperature inversions are especially common in Missouri. According to a study by scientists from the University of Missouri, temperature inversions occur on more than half of the days in the crop-growing months of March through July. The likelihood of such inversions increased the volatility risk of a dicamba-based crop system.

118. Even when sprayed properly, supposed "low" volatility, in-crop dicamba herbicides still can and do volatilize and become subject to movement in winds as low as 3 miles per hour.

119. Moreover, field tests undertaken in 2017 showed that volatility of the dicamba formulations sold by Monsanto, BASF and DuPont occurred over at least a 2-3 day period after application.

120. The number of acres that can be damaged by dicamba is directly related to the amount applied in an area.

121. As Monsanto knew or at minimum should have known, use of dicamba in areas with prevalent weeds such as pigweed, including Missouri, would be high, increasing the risk to susceptible off-target crops. As Monsanto also knew or should have known, the problem is compounded in areas such as Southeast Missouri, Northeast Arkansas, Southern Illinois, and Western Tennessee with high-volume planting of cotton and/or soybeans, which, if not dicamba-resistant, are highly susceptible to dicamba.

E. Dicamba Damage in 2017

122. In 2017, there were thousands of complaints of dicamba damage. According to the EPA, over 3.6 million acres – about 4 percent of all soybeans planted in the United States – were damaged by dicamba in 2017 alone.

123. High incidence of damage, predictably, occurred in Southeast Missouri, Northeast Arkansas, Southern Illinois, and Western Tennessee.

124. In these areas, dicamba herbicides were sprayed by so many people that the atmosphere was loaded with dicamba. Damage observed in 2017 included entire hundred-acre fields of soybeans with uniform cupped leaves throughout.

125. As of October 26, 2017, the Missouri Department of Agriculture had received more than 300 dicamba-related complaints, as compared with 27 complaints in 2016 and 3 in 2015. The majority of complaints came from southeast Missouri, particularly Mississippi, New Madrid, Stoddard, Scott and Dunklin Counties.

126. Estimates are that at least 325,000 acres of soybeans were injured by dicamba in Missouri alone.

127. Nationally, more than 2,000 dicamba-related injury investigations have been or are being conducted with more than 3.6 million acres of soybeans demonstrating signs of dicamba damage.

128. A leading weed scientist, Dr. Kevin Bradley from the University of Missouri has stated: "I've been doing this for more than 20 years now and I was around when Roundup Ready was introduced . . . In my opinion, this is nothing like the introduction of any trait or technology as far as the scope and the significance of the injury that's been observed across the U.S." He further stated: "I just don't think we know enough yet to apply [dicamba] safely." Eli Chen, *As harvest season begins, farmers worry how dicamba herbicide could affect next year's crop* (Sept. 19, 2017), http://news.stlpublicradio.org/post/harvest-season-begins-farmers-worry-how-dicamba-herbicide-could-affect-next-year-s-crop#stream/0.

129. Symptomology of dicamba damage to a soybean plant, including upward leaf cupping, is unique to dicamba. Cupping throughout a field is a typical pattern indicating volatilization.

130. Dr. Bradley explained that the pattern of damage in most fields and the symptomology suggests that volatilization is to blame: "The majority of fields I've been in are injured from one end to the other with no discernable difference in soybean symptomology . . . .

This suggests problems with off-site movement through volatility." Michelle Cummings, *The Dicamba Dilemma*, Momentum, Fall 2017, at 13, https://view.joomag.com/momentum-fall-2017/0150973001508187562?page=13.

131. Dr. Jason Norsworthy, Professor of Crop, Soil and Environmental Sciences for the University of Arkansas, told a task force of the Arkansas State Plant Board that he believed volatility was a "major cause of the issues" in 2017. Doug Rich, *Changes needed for dicamba formulations* (Sept. 25, 2017), http://www.hpj.com/crops/changes-needed-for-dicamba-formulations/article_61d06219-f796-5fbd-93e1-f789d923c541.html.

132. Field experiments conducted by university researchers in the summer of 2017 also identified evaporating dicamba as the cause of the symptomology.

133. Among other experiments, dicamba was sprayed into trays of soil at a remote location and then brought to and placed between rows of soybeans covered with plastic. The dicamba evaporated from the trays and caused damage to surrounding soybeans.

134. Volatilization cannot be corrected with education or manner of spraying by the applicator.

135. Dr. Rick Cartwright, a plant pathologist, University of Arkansas Extension administrator and Arkansas State Plant Board member, explained, "You apply [new dicamba formulations] to soybeans, and 36 hours later the product gets up and goes somewhere else. I don't know how you educate people to fix that." Greg D. Horstmeier, *Arkansas Sets Dicamba Limits* (Sept. 22, 2017), https://www.dtnpf.com/agriculture/web/ag/news/crops/article/2017/09/22/plant-board-limits-herbicide-use-2.

136. Steve Smith, a former member of Monsanto's dicamba advisory committee, testified at a congressional hearing that "[t]he widespread use of dicamba is incompatible with

Midwestern agriculture." Moreover, he concluded that "[e]ven the best, the most conscientious farmers cannot control where this weed killer will end up." Danny Hakim, *Monsanto's Weed Killer, Dicamba, Divides Farmers* (Sept. 21, 2017), https://www.nytimes.com/2017/09/21/business/monsanto-dicamba-weed-killer.html.

137. Mr. Smith was removed from Monsanto's dicamba advisory committee due to what Monsanto characterized as a "conflict of interest." *Id.*

138. Dr. Bradley has publicly expressed his opinion that all dicamba-based herbicides need to be kept "in the pre-plant, burndown, pre-emergence use pattern," and should not be used post-emergence. He explained that "the risk is too great for off-target movement to be spraying this for Palmer amaranth [pigweed] and waterhemp in soybeans." David Bennett, *What's the latest on dicamba drift in Missouri?* (Sept. 1, 2017), http://www.deltafarmpress.com/soybeans/what-s-latest-dicamba-drift-missouri.

139. On August 2, 2017, Monsanto issued "An Open Letter to Our Farmer-Customers." Calling farmers the "heart and soul of our company," Monsanto stated that it was taking reports of crop injuries from dicamba "extremely seriously," and represented its "commit[ment] to supporting [farmers] at every stage of the season – every year." *An Open Letter to Our Farmer-Customers* (Aug. 2, 2017), https://monsanto.com/products/product-stewardship/articles/to-our-farmer-customers/. Monsanto represented to farmers with dicamba crop injury: "[W]e will stand by you throughout the growing season." *Id.*

140. In October 2017, the EPA announced that, by agreement with Monsanto, BASF and DuPont, it was re-classifying in-crop dicamba as a restricted use herbicide. Among other things, only certified applicators with special training, and those under their supervision, may purchase and apply in-crop dicamba during the 2018 growing season. Other changes include:

additional record-keeping requirements; limiting applications to when maximum wind speeds are below 10 mph (from 15 mph); reducing the times during the day when applications can occur; and additional tank clean-out instruction.

141. The Missouri Department of Agriculture, on November 16, 2017, issued a Special Local Need Label for Engenia, limiting application to only certified applicators, requiring special dicamba training (along with verification of training presented to the seller), and prohibiting spraying before 7:30 am and after 5:30 pm. In addition, use of Engenia is prohibited after June 1, 2018 in Dunklin, Pemiscot, New Madrid, Stoddard, Scott, Mississippi, Butler, Ripley, Bollinger counties and Cape Girardeau, and prohibited after July 15, 2018 in all remaining counties. The Department issued the same restrictions for XtendiMax and FeXapan on December 11, 2017.

142. Such changes, however, do not reduce the inherent volatility of dicamba or address exposure through that volatility.

F. Defensive Purchasing of Dicamba-resistant Seed

143. It was foreseeable to Monsanto, and expected, that farmers would purchase seed containing the dicamba-resistant trait for defensive purposes, resulting in more and more demand due to fear of crop damage. And that is what occurred.

144. Farmers have purchased and will continue to purchase the dicamba-resistant trait at higher prices for defensive purposes even if they are not otherwise interested in the base germplasm of the seed or dicamba resistance itself.

145. As one farmer put it: "[Monsanto] knew that people would buy [Xtend] just to protect themselves, . . . You're pretty well going to have to. It's a good marketing strategy, I guess. It kind of sucks for us." Jack Kaskey & Lydia Mulvany, Bloomberg, *Creating a Problem*

– *And a Lucrative Solution* (Sept. 5, 2016), http://cehn-healthykids.org/wp-content/uploads/2017/07/Bloomberg-buisness-week-sept-5-112016.pdf.

146. As summed up by another farmer: "You either get on board or get hurt." Bryce Gray, St. Louis Post-Dispatch, *'Get on board or get hurt': Missouri farmers wrestle with widespread dicamba damage* (Oct. 22, 2017) http://www.theledger.com/news/20171022/get-on-board-or-get-hurt-missouri-farmers-wrestle-with-widespread-dicamba-damage.

147. According to Dr. Bradley: "Every farmer I've visited with that's been injured . . . has said the same thing, and that is that next year they will plant the new trait—the dicamba resistant trait— to protect themselves. I hear that terminology over and over and over . . . That they aren't able to plant whatever they want to plant. And that they've got to plant a dicamba resistant soybean in the future so they don't get injured." Center for Food Safety, Comments on the Arkansas State Plant Board's Proposal to Restrict Dicamba Use, at 35 (Oct. 30, 2017), http://www.centerforfoodsafety.org/files/cfs-dicamba-comments-for-arkansas--final1_40098.pdf.

148. Monsanto was so confident in expansion of the Xtend crop system that by 2015 it already had announced that it would invest almost $1 billion investment in a dicamba production facility.

149. According to Enrique Wehlen, Monsanto's dicamba plant manager, when construction is completed, anticipated in mid-2019, the facility is expected "to supply 50 million pounds of dicamba product, a key component of the Roundup Ready Xtend Crop System." Louise Poirier, *$975 Million Expansion Underway at Monsanto's Luling Plant* (Feb. 28, 2017), https://www.enr.com/articles/41538-975-million-expansion-underway-at-monsantos-luling-plant.

150. According to Monsanto Executive Vice President and Chief Strategy Officer Kerry Preete, this expansion "represents the single largest capital investment in Monsanto's self-manufacturing history." *Id.*

151. Other estimates from Monsanto are that the new plant is targeting 80M to 100M acres of capacity. *See* Monsanto Whistle Stop Tour "Accelerating the Future of Agriculture" Day 1 Session (Aug. 17, 2016), https://monsanto.com/app/uploads/2017/05/whistle_stop_viii_day-1-session_materials.pdf.

152. Notwithstanding the risk, and despite its pledges of responsibility, Monsanto plans to further expand sales of its dicamba-resistant technology, increasing the level of dicamba spraying, which in turn damages crops, resulting in further defensive purchases of dicamba-resistant technology and so on.

153. Monsanto now has agreements not only with DuPont but also with Syngenta to sell dicamba herbicide with Monsanto's "VaporGrip" technology.

154. Monsanto further is offering a cash-back incentive for farmers to use its XtendiMax herbicide in 2018, offering back $6 of the $11 per acre cost.

155. By some estimates, Monsanto amassed 20% of all U.S. soybean fields and 50% of all U.S. cotton fields in 2017, just two years after the initial launch of XtendFlex cotton in 2015. *See Latest Monsanto GMO seeds raises worries of monopoly* (Dec. 14, 2017), www.dailymail.co.uk/wires/afp/article-5178029/Latest-Monsanto-GMO-seeds-raises-worries-monopoly.html.

156. Monsanto plans more than 300 Xtend soybean varieties in 2018, as compared to 120 in 2017.

157. The increase in acres planted with Monsanto's Xtend technology was and is expected to be astronomical. As of January 2016, Monsanto was projecting that the "Industry's Largest Seed Technology Platform" with RR2 Xtend would reach 2/3 of all U.S. soybean acres by fiscal year 2019. *See* Monsanto Company First Quarter 2016 Financial Results (Jan. 6, 2016), https://monsanto.com/app/uploads/2017/05/2016.01.06_mon_q1f16_financial.pdf. As of mid-2016, it was projecting a penetration in soybeans of 15 million acres in 2017, 55 million acres in 2019, with an 80 million target thereafter. *See* Brett Begemann Presentation BMO Farm to Market Conference (May 18, 2019), https://monsanto.com/app/uploads/2017/05/2016.05.18_bmo_conference _begemann.pdf.

158. By mid-2017, Monsanto had revised its projections, stating that RR2 Xtend soybeans were expected to reach 20M acres in the first year of the full system launch. *See* Monsanto Company Third Quarter FY 2017 Earnings Conference Call Power Point Presentation (June 28, 2017), https://monsanto.com/app/uploads/2017/06/FINAL-DRAFT-Q3F17-Earnings-Slides-6-26-17/pdf.

159. The number of soybean acres planted with Xtend technology alone rose from approximately 1 million acres in 2016 to more than 20 million acres in 2017. Monsanto projects that this will double to more than 40 million acres in 2018, and 55 million acres in 2019. Monsanto is targeting a penetration of more than 80 million acres in the U.S. *See* Monsanto Fourth-Quarter FY2017 Earnings Presentation "Fiscal Year 2017 Results and Outlook" (Oct. 4, 2017), https://monsanto.com/app/uploads/2017/10/MonsantoCo._Q4F17_Earnings_Presentation_2017.10.04.pdf.

160. In 2017, the USDA reported a "record high" of 89.5 million acres of soybeans planted in the United States. Even at that high level, Monsanto is projecting that it will capture near 100% of the entire United States soybean market.

161. The more crops planted with dicamba-resistant seed and the more dicamba sprayed after emergence of susceptible non-resistant crops, the more damage there will be and the more farmers will be forced to buy Xtend technology to protect themselves at higher cost.

162. Farmers must either buy seed containing Monsanto's technology at higher price or run the risk that their crops will be damaged by dicamba.

163. Even this course is unavailable to farmers who grow crops for which there is no dicamba-tolerant seed.

164. The situation boils down to dicamba being an all-or-nothing technology. Either everyone plants dicamba-resistant seed and sprays dicamba or farmers choose the seed they want to plant and no one sprays dicamba.

165. Monsanto's attempt to force everyone to use its Xtend Crop System is not reasonable or in the public interest.

166. Among other things, there are alternatives to glyphosate, including glufosinate (e.g. LibertyLink sold by Bayer) and other herbicides in development. While dicamba is effective against weeds, it is ruinous to non-resistant crops. Dicamba is highly dangerous not only to non-tolerant crops like soybeans and cotton, but fruits, vegetables, trees. and flowers that feed honeybees. Moreover, extensive use of dicamba is likely to produce the same tolerance as did extensive use of glyphosate. It has been reported that researchers have shown that pigweed can develop dicamba resistance within as few as three years. *See* Caitlin Dewey, *This miracle weed killer was supposed to save farms. Instead, it's devastating them* (Aug. 29, 2017)

https://www.washingtonpost.com/business/economy/this-miracle-weed-killer-was-supposed-to-save-farms-instead-its-devastating-them/2017/08/29/33a21a56-88e3-11e7-961d-2f373b3977ee_story.html?utm_term=.5435b9e33dd3.

167. Plaintiffs grew soybean crops susceptible to and not genetically modified to be resistant to dicamba. Each observed uniform leaf cupping throughout his fields indicative of volatilization. Each suffered yield loss caused by dicamba.

168. Injury to Plaintiffs' non-resistant crops is a direct result of Monsanto's development, marketing and sale of a dicamba-based crop system featuring Monsanto's dicamba-resistant seed trait specifically developed and sold for the purpose of use with in-crop dicamba herbicide.

CLASS ACTION ALLEGATIONS

169. Plaintiffs bring this class action pursuant to Missouri Rule of Civil Procedure 52.08 on behalf of themselves and all persons and entities who are citizens of Missouri and who in 2017 were producers (*i.e.*, an owner, operator, landlord, waterlord, tenant or sharecropper, who shares in the risk of producing crops and is entitled to share in the crop available for marketing from the farm, as reflected in FSA Form 578, but not landlords receiving only a fixed cash amount for renting the land that does not vary with yield) of soybean crops not resistant to and damaged by dicamba herbicide.

170. Excluded from the Class are Defendant, including any parent, subsidiary, affiliate or controlled person of Defendant; Defendant's officers, directors, agents or employees, the judicial officers assigned to this litigation; and members of their staffs and immediate families. Also excluded are persons or entities who purchased dicamba-resistant (Xtend technology whether sold or licensed by Monsanto) seed prior to 2018.

171. The proposed Class meets all requirements for class certification. The Class satisfies the numerosity standards, as it is believed to number well into the hundreds of persons in Missouri. As a result, joinder of all Class Members in a single action is impracticable. Class Members may be informed of the pendency of this Class Action by mail, published and/or broadcast notice.

172. There are questions of fact and law common to the Class which predominate over any questions affecting only individual members. Questions of law and fact common to the Class arising from Defendant's actions include, without limitation:

a) Whether dicamba is inherently and unavoidably dangerous when used over the top of growing plants during summer months when other non-dicamba resistant susceptible plants also are emergent;

b) Whether Monsanto carried on an abnormally dangerous activity including:

1) whether accelerating a dicamba-based crop system, aggressive promotion and sales of seed and technology for the express purpose of over-the-top dicamba application in areas including those with high levels of weeds and susceptible non-dicamba resistant crops entails high degree of risk of harm to land or chattels of others;

2) whether the likelihood of such harm is great;

3) inability to eliminate the risk by exercise of reasonable care;

4) whether the new use of dicamba is not a matter of common usage;

5) the inappropriateness of such activity to the place carried on; and whether the value of such activity to the community is outweighed by its dangerous attributes;

c) Whether it was foreseeable to Monsanto that Plaintiffs would be harmed by its sale and promotion of seed technology intended for use as part of a crop system involving application of dicamba over the top of growing plants in the vicinity of non-resistant susceptible crops;

d) Whether Monsanto owed a duty of care to Plaintiffs;

e) Whether Monsanto breached a duty of care to Plaintiffs;

f) Whether Monsanto's breach of duty caused harm to Plaintiffs;

g) Whether Monsanto sold a product unreasonably dangerous when used in a manner reasonably anticipated and Plaintiffs were harmed by such defective condition;

h) Whether invasion of dicamba onto property possessed by Plaintiffs constitutes a trespass and whether Monsanto aided and abetted a trespass;

i) Whether Monsanto acted with complete indifference to or disregard for the rights of others.

173. The questions set forth above predominate over any questions affecting only individual persons, and a class action is superior with respect to considerations of consistency, economy, efficiency, fairness and equity, to other available methods for the fair and efficient adjudication of this controversy.

174. A class action is the appropriate method for the fair and efficient adjudication of this controversy. The presentation of separate actions by individual Class members could create risk of inconsistent and varying adjudications, establish incompatible standards of conduct for Defendant and/or substantially impair or impede the ability of Class members to protect their interests.

175. The named Plaintiffs are adequate representatives of the Class. Claims or defenses of Plaintiffs are typical of those of the Class. Plaintiffs are members of the Class and their interests do not conflict with interests of members of the Class they seek to represent. The interests of Class members will be fairly and adequately protected by Plaintiffs and their undersigned counsel, who have extensive experience prosecuting complex class action litigation.

176. Maintenance of this action as a class action is a fair and efficient method for adjudication. It would be impracticable and undesirable for each member of the Class to bring a

separate action. In addition, the maintenance of separate actions would place a substantial and unnecessary burden on the courts and could result in inconsistent adjudications, while a single class action can determine, with judicial economy, the rights of all members of the Class.

CLAIMS FOR RELIEF

COUNT I – STRICT LIABILITY ULTRAHAZARDOUS

177. Plaintiffs incorporate by reference Paragraphs 1 - 176 as though fully alleged herein.

178. Monsanto's dicamba crop system, entailing seed with Monsanto's dicamba-resistant trait and in-crop use of dicamba herbicide, has a high degree of risk of harm to others, specifically, farmers who grow susceptible non-dicamba resistant crops such as soybeans.

179. Monsanto not only developed and promoted that system, but entered into agreements and combinations with BASF and DuPont to accelerate and increase its use by further sales of dicamba-resistant seed and dicamba herbicide for over-the-top application.

180. The likelihood of serious harm to non-resistant crops from exposure to dicamba is great.

181. The risk of harm cannot be eliminated with exercise of reasonable care.

182. A crop system entailing application of dicamba over the top of growing plants is not a matter of common usage, but to the contrary, is new.

183. Monsanto's promotion, licensing, and sale of dicamba-resistant trait in cotton and soybean seed in areas including Missouri, expressly for use with dicamba herbicide to be sprayed over the top of growing plants was and is inappropriate given factors including foreseeably high usage of dicamba, as well as high levels of crops, including soybeans, particularly susceptible to

off-target damage. Dicamba is so inherently dangerous to susceptible non-dicamba tolerant crops as to be unsafe and unusually dangerous for use in Missouri.

184. The value of a dicamba-based crop system to the community is not outweighed by its dangerous attributes.

185. Monsanto's dicamba crop system is an ultrahazardous activity for which Monsanto can and should be strictly liable.

186. As a result of Monsanto's activities, Plaintiffs were harmed by damage to their crops from exposure to dicamba and loss of yield, which is the kind of harm the possibility of which makes the activity abnormally dangerous.

187. Monsanto's conduct in instituting and carrying out the ultrahazardous activity showed a complete indifference to or conscious disregard of the rights of others, including Plaintiffs. Punitive damages are thus warranted.

COUNT II – NEGLIGENCE

In the alternative to Count I, Plaintiffs assert this Count II for negligence.

188. Plaintiffs incorporate by reference Paragraphs 1 - 176 as though fully alleged herein.

189. Monsanto recognizes its role as self-professed innovator and promoter of herbicides and crops genetically modified to withstand them.

190. Monsanto pledges that it "places the highest priority on the responsible development, manufacture and use of crop protection products." *Product Stewardship and The Pledge*, https://monsanto.com/products/product-stewardship/stewardship-pledge/ (last visited Dec. 19, 2017).

191. Monsanto represents that it adheres to "the responsible development, management and use of technologies and products across our seeds, traits, and crop protection businesses through the entire product life cycle." *Product Stewardship*, https://monsanto.com/products/product-stewardship/ (last visited Dec. 19, 2017).

192. According to Monsanto, "[s]tewardship is the shared responsibility of Monsanto and those who provide, handle and use our products . . . We want to ensure our products continue to be used properly. By following product life cycle stewardship processes, we stand behind our products from research and discovery to discontinuation and disposal." *Product Stewardship Safety*, https://monsanto.com/products/product-stewardship/product-stewardship-safety/ (last visited Dec. 19, 2017).

193. Farmers are Monsanto's most immediate stakeholders. Those with non-resistant crops susceptible to dicamba are the most likely to be harmed by Monsanto's irresponsible conduct.

194. Discussing farmers' concerns over the dicamba damage in 2017, Monsanto described farmers as "the lifeblood of our company and our first priority." Brian Naber, *Dicamba Field Investigations: What Monsanto Has Learned So Far* (July 21, 2017), https://monsanto.com/products/articles/dicamba-field-investigations-monsanto-learned-far/.

195. Monsanto knew that its commercialization, promotion, sale, and licensing of the dicamba-resistant seed trait would result in significant use of dicamba herbicide over the top of growing plants. Monsanto developed the trait, sold and licensed it to others, for this very purpose, which was intended and anticipated by Monsanto.

196. Monsanto knew but at bare minimum should have known that even supposed "low-volatility" dicamba herbicide is still volatile, and still at high risk of moving off-target and damaging desirable non-resistant crops.

197. The vast majority of damage in 2017 was attributable to volatility of dicamba, a function of chemistry and formulation rather than manner of application.

198. To the extent damage was attributable to physical drift, however, Monsanto also knew or should have known that such drift was highly likely to occur.

199. Physical drift, as opposed to volatilization, is movement of spray droplets to non-target areas.

200. Dicamba not only is very volatile, but also very prone to physical drift.

201. Such drift can be influenced by weather, wind speed and direction, droplet size and ground speed or spray pressure.

202. Temperature inversions increase the likelihood of physical drift as well as movement upon volatilization.

203. Monsanto knew or should have known that conditions in Missouri, including temperature inversions and a high level of crops susceptible to dicamba, created high risk of dicamba damage whether from volatilization or physical drift.

204. Moreover, as described even by the EPA, the level of precaution necessary to prevent dicamba from moving off target is "extraordinary." Tom Polansek, *Monsanto, BASF weed killers strain U.S. states with damage complaints* (November 1, 2017), https://www.reuters.com/article/us-usa-pesticides-complaints/monsanto-basf-weed-killers-strain-u-s-states-with-damage-complaints-idUSKBN1D14N0.

205. Label instructions were and are extraordinarily difficult if not impossible to follow. For example, the XtendiMax instructions entailed at least four sources: a container label with instructions for use, a supplemental label, an ever-changing website, and local state-by-state directions. Among other things, farmers were to spray only when winds were at least 3 miles per

hour, but no more than 15 (now 10) miles per hour, significantly narrowing the window for timely application, particularly for farmers with many and/or geographically disbursed acres to spray. The label also stated that XtendiMax should not be sprayed during a temperature inversion, a phenomenon difficult to predict. It also must be sprayed no higher than 24 inches above the crops, using nozzles designed to produce coarse/ultra-coarse (larger) droplets. There are restrictions on the pattern of the spray and the pounds per square inch of pressure. Restrictions vary according to crop.

206. In addition, Monsanto knew, and was warned, that many of the user instructions are contrary to typical user practices. At an August 8, 2016 Arkansas Pesticide Committee meeting, Boyd Carey from Monsanto acknowledged that "there are things [in the instructions] that are different than typical practices today." Arkansas Pesticide Committee Meeting (Aug. 8, 2016), https://monsanto.com/app/uploads/2017/11/Ex.-T.pdf.

207. For example, course/ultra-course nozzles, producing larger droplet size, generally are understood by farmers as detrimental to coverage. The 24-inch boom height is lower that most farmers run their boom. Speed of the sprayer, while affecting spray pressure, also affects the number of acres that can be covered in a given time span. As one person attending an August 8, 2016 Arkansas Pesticide Committee Meeting said to Monsanto: "You're dealing with real people who have to fight the clock . . . We got guys with eight, 10,000 acres who have four planters, 30-foot long[,] 25 foot long because they have to plant it as quick as they can plant it because it's limited. They either lose their moisture or it turns to mud. That's what we're dealing with. We're not dealing with theory or drawing board things. That's why the problem with Dicamba is serious." Arkansas Pesticide Committee Meeting Minutes (Aug. 8, 2016), https://monsanto.com/app/uploads/2017/11/Ex.-T.pdf.

208. Dr. Bob Hartzler, Professor of Agronomy and Extension Weed Specialist for Iowa State University, commented that the restrictions in the XtendiMax label "is unlike anything that's ever been seen before." Tom Polansek & Karl Plume, *U.S. farmers confused by Monsanto weed killer's complex instructions* (Aug. 21, 2017), https://www.reuters.com/article/us-usa-pesticides-labels/u-s-farmers-confused-by-monsanto-weed-killers-complex-instructions-idUSKCN1B110K.

209. Larry Steckel, a weed scientist in Tennessee, is quoted as saying that "it's almost impossible" to follow label directions for dicamba-based herbicides. Dan Nosowitz, *Farmers Say It's Nearly Impossible to Follow Monsanto's Dicamba Directions*, (Aug. 25, 2017) https://modernfarmer.com/2017/08/farmers-say-nearly-impossible-follow-monsantos-dicamba-directions/.

210. Not only did Monsanto recognize the difficulties in conditions and application, but the need for rigorous education and training on the risks of dicamba sprayed over the top of growing plants and proper manner of application. At the August 8, 2018 Arkansas Pesticide Committee meeting, Duane Simpson from Monsanto acknowledged that application instructions were "going to take a lot of training, understanding, and respect to do this correctly." Arkansas Pesticide Committee Meeting Minutes (Aug. 8, 2016) https://monsanto.com/app/uploads/2017/11/Ex.-T.pdf. Sufficient effective education and training, however, were not provided.

211. Moreover, Monsanto, which enters into agreements with those purchasing its seeds, could have made dicamba-specific application training a requirement of purchasing seed with the dicamba-resistant trait, but did not.

212. Neither was any special certification required for application of the "VaporGrip" Xtend and FeXapan or Engenia herbicides.

213. Monsanto knew or should have known that even conscientious applicators would have significant difficulty with the instructions and restrictions for in-crop dicamba.

214. Even a very small amount of drift can result in extensive damage to susceptible non-resistant crops.

215. It has been estimated that while one-eighth of a quart of glyphosate "will cause 20 percent damage to susceptible vegetation . . . you get 20 percent damage at one-fifteen-hundredth of a pint of dicamba." According to Larry Steckel, "That's a game changing difference." Elton Robinson, *New Herbicide Tech Demands New Nozzle Thinking – 10 Quick Points*, http://agfaxweedsolutions.com/2017/01/12/new-herbicide-tech-demands-new-nozzle-thinking-10-quick-points/ (last visited Dec. 19, 2017).

216. Monsanto knew, or at bare minimum should have known, that in-crop use of dicamba would result in dicamba damage to susceptible, non-resistant crops.

217. Monsanto aggressively marketed a dicamba crop system knowing that dicamba could not be safely used in-crop and carries significant and serious risk to farmers growing crops not tolerant to dicamba.

218. It was foreseeable to Monsanto, and highly probable, that injury to farmers growing susceptible non-resistant crops such as Plaintiffs would occur.

219. Monsanto had a duty of care to not create, or continue, an unreasonable risk of harm to Plaintiffs.

220. Because of the inherent and high risk of widespread harm associated with dicamba, Monsanto had a duty to exercise the highest degree of care in its commercialization of dicamba-resistant seed.

221. At a minimum, however, Monsanto had a duty to exercise ordinary care to exercise precaution commensurate with the dangers to be reasonably anticipated under the circumstances.

222. Rather than exercise even ordinary care, Monsanto did just the opposite, widely selling and licensing for sale a dicamba-resistant trait in seed specifically intended for use with an inadequately tested and highly volatile herbicide seriously dangerous to susceptible non-resistant crops, and in a manner most likely to cause damage, including aggressive marketing, licensing, and unlimited release of a much-touted crop system into areas such as Missouri with significant pigweed, resulting in foreseeably heavy use of dicamba under circumstances including common occurrence of weather inversions, uncertified applicators, foreseeable difficulty of directions, lack of adequate education and training, and heavy planting of highly susceptible crops, creating high probability of off-target movement and damage to non-resistant crops.

223. Monsanto breached its duty of care.

224. As a direct and proximate result, Plaintiffs were damaged.

225. Monsanto's conduct showed a complete indifference to or conscious disregard of the rights of others, including Plaintiffs. Punitive damages are thus warranted.

COUNT III - STRICT LIABILITY
DEFECTIVE DESIGN

In the alternative to Counts I-II, Plaintiffs assert this Count III for design defect strict liability.

226. Plaintiffs incorporate by reference Paragraphs 1 - 176 as though fully alleged herein.

227. Monsanto, in the course of its business, developed, directly sold, licensed, and distributed seed trait technology, as well as soybean and cotton seed containing that technology, for resistance to dicamba. Such seed was specifically intended for use with dicamba herbicide to be sprayed over crops after emergence.

228. The dicamba-resistant seed trait itself, and seed containing that trait sold by Monsanto and by others under license with Monsanto and acting in joint venture or other combination with it, was designed, sold and licensed by Monsanto as part of a crop system in which dicamba herbicide is sprayed over the top of growing plants in the same areas as non-resistant plants also emerging and highly susceptible to dicamba, including soybeans.

229. When put to this reasonably anticipated use, the seed and crop system are unreasonably dangerous as dicamba volatilizes, and drifts, resulting in off-target movement and harm to susceptible non-resistant crops.

230. The dicamba-resistant seed, as so designed and used, was in defective condition unreasonably dangerous at the time of sale. This is true even if dicamba application involved user error or misuse, which was objectively foreseeable.

231. Moreover, Monsanto designed, marketed, affirmatively promoted, sold and licensed its dicamba-resistant seed and trait for the express purpose of and in combination with in-crop dicamba application as an integrated dicamba-based crop system unreasonably dangerous for the reasons herein described.

232. As a direct result of the defective condition of the seed and trait, as developed, sold and licensed for post-emergence use of dicamba herbicide, Plaintiffs were damaged.

233. Monsanto's conduct showed a complete indifference to or conscious disregard of the rights of others, including Plaintiffs. Punitive damages are thus warranted.

COUNT IV - TRESPASS

In addition or in the alternative to Counts I-III, Plaintiffs assert this Count IV for trespass.

234. Plaintiffs incorporate by reference Paragraphs 1 - 176 as though fully alleged herein.

235. Monsanto intentionally developed, promoted, marketed and sold a genetically modified seed and seed trait for soybean and cotton for and with the express purpose of allowing and encouraging others to spray dicamba herbicide over the top of crops grown from seed containing Monsanto's dicamba-resistant technology.

236. Monsanto intentionally promoted and encouraged use of in-crop herbicide, including its own XtendiMax brand, FeXapan sold by DuPont containing Monsanto's "VaporGrip Technology" and Engenia sold by BASF. Monsanto actively and aggressively marketed, promoted, and encouraged use of dicamba over the top of growing plants as part of a "crop system" for use with Monsanto's dicamba-resistant seed.

237. Monsanto intentionally sold genetically modified seed and traits in soybean and cotton seed directly and through others, including DuPont, in which Monsanto has financial interest, into areas it knew were planted with non-resistant crops highly sensitive to dicamba and with knowledge not only that dicamba would be sprayed over the top of emerging resistant soybean and cotton as intended by Monsanto, but that dicamba had and would move off-target onto property without permission of rightful owners and possessors, including Plaintiffs.

238. Dicamba entered and was deposited upon property of which Plaintiffs have possession and without Plaintiffs' permission.

239. Monsanto knew that such intrusion would, to a substantial degree of certainty, result from its acts.

240. In addition, Monsanto promoted, aided, abetted, assisted, and contributed to the commission of a trespass.

241. Such invasion interfered with Plaintiffs' right of exclusive possession and caused substantial damage to their property.

242. As a result, Plaintiffs were damaged.

243. Monsanto's conduct showed a complete indifference to or conscious disregard of the rights of others, including Plaintiffs. Punitive damages are thus warranted.

Respectfully Submitted,

By: /s/ Don M. Downing
Gray, Ritter & Graham, P.C.
Don M. Downing, #30405 MO
Gretchen Garrison #33963 MO
Jason Sapp #58511 MO
Kaitlin Bridges #60861 MO
Jack Downing #70034 MO
701 Market Street, Suite 800
St. Louis, MO 63101
Tel: 314-241-5620
Fax: 314-241-4140
ddowning@grgpc.com
ggarrison@grgpc.com
jsapp@grgpc.com
kbridges@grgpc.com
jdowning@grgpc.com

CERTIFICATE OF SERVICE

The undersigned certifies that a true and correct copy of the foregoing was served this 15th day of January, 2018 by hand-delivery to the registered agent of Monsanto Company:

CSC of St. Louis County, Inc.
130 South Bemiston Ave., Suite 700
Clayton, MO 63105

/s/ Don M. Downing